

L Number	Hits	Search Text	DB	Time stamp
1	4965	metathesis	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
2	674788	ruthenium or Ru	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
3	1250	metathesis and (ruthenium or Ru)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
4	4349693	Osmium or Os	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
5	4644815	(ruthenium or Ru) or (Osmium or Os)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
6	37	trisubstituted adj alkene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
7	247	trisubstituted adj olefin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
8	273	(trisubstituted adj alkene) or (trisubstituted adj olefin)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
9	192	cross adj metathesis	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
10	140	(ruthenium or Ru) and (cross adj metathesis)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
11	265460	styrene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
12	49	((ruthenium or Ru) and (cross adj metathesis)) and styrene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
13	116	585/365.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
14	116	585/366.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
15	77	585/364.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
16	194	585/643.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
17	746	560/205.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35

18	156	560/225.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
19	451	564/159.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
20	535	562/598.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
22	2252	585/365.ccls. or 585/366.ccls. or 585/364.ccls. or 585/643.ccls. or 560/205.ccls. or 560/225.ccls. or 564/159.ccls. or 562/598.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
33	0	19746040.URPN.	USPAT	2003/09/30 06:35
21	3	9951344.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
23	3	"9951344"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
24	2	6316380.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
25	2	6316380.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
26	13	((trisubstituted adj alkene) or (trisubstituted adj olefin)) and (metathesis and (ruthenium or Ru))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
27	2	6348551.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
28	2	5936100.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
29	5	5936100.URPN.	USPAT	2003/09/30 06:35
30	1	9320111.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
31	2	19746040.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
32	20	(cross adj metathesis) and (585/365.ccls. or 585/366.ccls. or 585/364.ccls. or 585/643.ccls. or 560/205.ccls. or 560/225.ccls. or 564/159.ccls. or 562/598.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
34	3	"19746040"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
35	5	("6500975").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	BRS	L1	4965	metathesis	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
2	BRS	L2	67478 8	ruthenium or Ru	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
3	BRS	L3	1250	metathesis and (ruthenium or Ru)	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
4	BRS	L4	43496 93	Osmium or Os	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
5	BRS	L5	46448 15	(ruthenium or Ru) or (Osmium or Os)	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
6	BRS	L6	37	trisubstituted adj alkene	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
7	BRS	L7	247	trisubstituted adj olefin	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		

	Err ors
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2	0
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4	0
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6	0
7	0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
8	BRS	L8	273	(trisubstituted adj alkene) or (trisubstituted adj olefin)	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
9	BRS	L9	192	cross adj metathesis	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
10	BRS	L10	140	(ruthenium or Ru) and (cross adj metathesis)	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
11	BRS	L11	26546 0	styrene	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
12	BRS	L12	49	((ruthenium or Ru) and (cross adj metathesis)) and styrene	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
13	BRS	L13	116	585/365.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
14	BRS	L14	116	585/366.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		

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15	BRS	L15	77	585/364.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
16	BRS	L16	194	585/643.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
17	BRS	L17	746	560/205.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
18	BRS	L18	156	560/225.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
19	BRS	L19	451	564/159.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
20	BRS	L20	535	562/598.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
21	BRS	L22	2252	585/365.ccls. or 585/366.ccls. or 585/364.ccls. or 585/643.ccls. or 560/205.ccls. or 560/225.ccls. or 564/159.ccls. or 562/598.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
22	BRS	L33	0	19746040.URPN.	USPAT	2003/09/30 06:35		

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23	BRS	L21	3	9951344.pn.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
24	BRS	L23	3	"9951344"	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
25	BRS	L24	2	6316380.pn.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
26	BRS	L25	2	6316380.pn.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
27	BRS	L26	13	((trisubstituted adj alkene) or (trisubstituted adj olefin)) and (metathesis and (ruthenium or Ru))	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
28	BRS	L27	2	6348551.pn.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
29	BRS	L28	2	5936100.pn.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
30	BRS	L29	5	5936100.URPN.	USPAT	2003/09/30 06:35		

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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
31	BRS	L30	1	9320111.pn.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
32	BRS	L31	2	19746040.pn.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
33	BRS	L32	20	(cross adj metathesis) and (585/365.ccls. or 585/366.ccls. or 585/364.ccls. or 585/643.ccls. or 560/205.ccls. or 560/225.ccls. or 564/159.ccls. or 562/598.ccls.)	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
34	BRS	L34	3	"19746040"	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
35	IS&R	L35	5	("6500975").PN.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		

	Err ors
31	0
32	0
33	0
34	0
35	0

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NEWS 4	Feb 24	TEMA now available on STN
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NEWS 6	Feb 26	PCTFULL now contains images
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NEWS 19	May 19	Simultaneous left and right truncation added to WSCA
NEWS 20	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
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NEWS 22	Jun 06	PASCAL enhanced with additional data
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NEWS 27	Jul 21	Polymer class term count added to REGISTRY
NEWS 28	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
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NEWS 30	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 31	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS 32	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
NEWS 33	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
NEWS 34	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
NEWS 35	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS 36	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS 37	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation

NEWS 38 AUG 18 Simultaneous left and right truncation added to ANABSTR

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MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
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FULL ESTIMATED COST	0.21	0.21

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<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e 2-methyl-2-butene/cn

E1	1	2-METHYL-2-BUTENAL/CN
E2	1	2-METHYL-2-BUTENAMIDE/CN
E3	1 -->	2-METHYL-2-BUTENE/CN
E4	1	2-METHYL-2-BUTENE CATION RADICAL/CN
E5	1	2-METHYL-2-BUTENE COMPOUND WITH BROMINE (1:1)/CN
E6	1	2-METHYL-2-BUTENE COMPOUND WITH CHLORINE (1:1)/CN
E7	1	2-METHYL-2-BUTENE DIMER/CN
E8	1	2-METHYL-2-BUTENE OXIDE/CN
E9	1	2-METHYL-2-BUTENE RADICAL CATION/CN

E10 1 2-METHYL-2-BUTENE TRIMER/CN
 E11 1 2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-CIS-2-PENTENE-PIPERY
 LENE COPOLYMER/CN
 E12 1 2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-PIPERYLENE COPOLYMER
 /CN

=> e3

L1 1 2-METHYL-2-BUTENE/CN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 513-35-9 REGISTRY
 CN 2-Butene, 2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN .beta.-Isoamylene
 CN 1,1,2-Trimethylethylene
 CN **2-Methyl-2-butene**
 CN 3-Methyl-2-butene

CN Amylene

CN NSC 74118

CN Trimethylethene

CN Trimethylethylene

FS 3D CONCORD

MF C5 H10

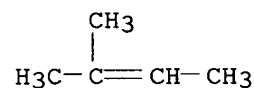
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 ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB,
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 ULIDAT, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



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 31 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 4100 REFERENCES IN FILE CAPLUS (1937 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

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FULL ESTIMATED COST	6.30	6.51

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FILE LAST UPDATED: 10 Sep 2003 (20030910/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l1

L2 4102 L1

=> metathesis

11174 METATHESIS

157 METATHESES

L3 11221 METATHESIS

(METATHESIS OR METATHESES)

=> l2 and l3

L4 27 L2 AND L3

=> d l27 1-27 ti

L27 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d l4 1-27 ti

L4 ANSWER 1 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Olefin **metathesis** in a distillation column reactor

L4 ANSWER 2 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Preparation of ruthenium alkylidene complexes as catalysts for cross-**metathesis** reactions of functionalized and substituted olefins

L4 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis of Symmetrical Trisubstituted Olefins by Cross **Metathesis**

L4 ANSWER 4 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Progress toward the Synthesis of Garsubellin A and Related Phloroglucins: The Direct Diastereoselective Synthesis of the Bicyclo[3.3.1]nonane Core

L4 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI A rapid formal synthesis of the macrolide (-)-A26771B

L4 ANSWER 6 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Process for the **metathesis** of olefins in the presence of a stabilizing agent for the catalyst

L4 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Procedure for the **metathesis** of olefinic C5 cuts with ethylene

or propylene using a catalyst of rhenium and cesium on δ -alumina

- L4 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Continuous olefin **metathesis** or disproportionation in
multireactor systems
- L4 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI A Formal Total Synthesis of Roseophilin: Cyclopentannulation Approach to
the Macrocyclic Core
- L4 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Metathesis** process and catalysts for the manufacture of
propylene from mixtures of 1-butene, 2-butene and isobutene
- L4 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Four-step process for the conversion of C4-5 olefinic fractions into
ethers and propylene
- L4 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Preparation of C4-alkene streams by olefin **metathesis**
- L4 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI A Hydrocarbon Structure Reactivity Study in ADMET Chemistry. 1.
1,1-Disubstituted and Trisubstituted Olefins
- L4 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI A Simple Allylic Amination Procedure and the **Metathesis** of
N-Sulfinylcarbamates
- L4 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Preparation of a heptamethyltetrahydronaphthalene
- L4 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Double-insertion reaction of alkynes with methylzirconocene cation
[Cp'2ZrMe]⁺: formation of an unusual distorted η^5 -pentadienyl ligand
- L4 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Study of the gas-phase chemistry of yttrium-methyl cation YCH3⁺:
 σ -bond **metathesis** and migratory insertion of C:C bonds
into the Y-methyl bond
- L4 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Catalytic poisons in **metathesis** of 1-hexene on an
aluminum-rhenium catalyst
- L4 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Isobutylbenzene
- L4 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Synthesis and catalytic properties of W(OAr)2Cl2(CHCMe3)(OR2) and
W(OAr)2Cl(CHCMe3)(CH2CMe3)(OR2) (Ar = 2,6-disubstituted phenyl; R = Et or
CHMe2), new unicomponent catalysts for **metathesis** of acyclic and
cyclic olefins, with or without functional groups
- L4 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Reactions of the metal carbenes FeCH2⁺ and CoCH2⁺ with olefins in the gas
phase. Studies involving olefin **metathesis**
- L4 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
TI Catalytic homologation of olefins to higher and lower olefins: a
metathesis related reaction

L4 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Reactions of benzyldiene pentacarbonyltungsten with alkenes

L4 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Olefin **metathesis**. IX. The reactivity of various olefins and the reaction mechanism for the **metathesis** over rhenium(VII) oxide-aluminum oxide catalyst

L4 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Interaction of vanadium tetrachloride with .alpha.-olefins. .pi.-Complex formation, with concomitant oligomerization, isomerization and methathesis reactions

L4 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
 TI **Metathesis** reactions by iridium catalysts. Synthesis of cis-1,3-dialkenylcyclopentanes

L4 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Catalytic **metathesis** of .alpha.-olefins

=> ruthenium or Ru

74638 RUTHENIUM
 20 RUTHENIUMS
 74638 RUTHENIUM
 (RUTHENIUM OR RUTHENIUMS)
 56862 RU
 185 RUS
 57024 RU
 (RU OR RUS)

L5 91536 RUTHENIUM OR RU

=> osmium or os

21346 OSMIUM
 6 OSMIUMS
 21348 OSMIUM
 (OSMIUM OR OSMIUMS)
 24317 OS
 70 OSES
 285 ORA
 19 ORAS
 13 OSAR
 83 OSSA
 24775 OS
 (OS OR OSES OR ORA OR ORAS OR OSAR OR OSSA)

L6 35651 OSMIUM OR OS

=> 15 or 16

L7 115781 L5 OR L6

=> 15 and 17

L8 91536 L5 AND L7

=> 14 and 17

L9 5 L4 AND L7

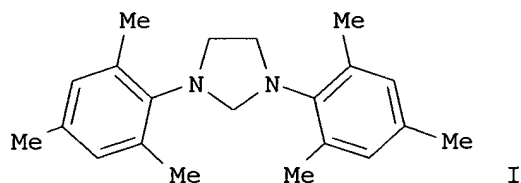
=> d 19 1-5 ti fbib abs

L9 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Preparation of **ruthenium** alkylidene complexes as catalysts for cross-**metathesis** reactions of functionalized and substituted olefins

AN 2002:777864 CAPLUS
 DN 137:295099
 TI Preparation of **ruthenium** alkylidene complexes as catalysts for
 cross-~~metathesis~~ reactions of functionalized and substituted
 olefins
 IN Grubbs, Robert H.; Chatterjee, Arnab K.; Choi, Tae-Lim; Goldberg, Steven
 D.; Love, Jennifer A.; Morgan, John P.; Sanders, Daniel P.; Scholl,
 Matthias; Toste, F. Dean; Trnka, Tina M.
 PA California Institute of Technology, USA
 SO PCT Int. Appl., 68 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002079126	A1	20021010	WO 2002-US10196	20020401
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
				US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214
	US 2003100776	A1	20030529	US 2002-114418	20020401
				US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214

OS MARPAT 137:295099
 GI



AB The invention pertains to the use of Group 8 transition metal carbene complexes as catalysts for olefin cross-~~metathesis~~ reactions. In particular, **ruthenium** and **osmium** alkylidene complexes substituted with an N-heterocyclic carbene ligand are used to catalyze cross-~~metathesis~~ reactions to provide a variety of substituted and functionalized olefins, including phosphonate-substituted olefins, directly halogenated olefins, 1,1,2-trisubstituted olefins, and quaternary allylic olefins. The invention further provides a method for

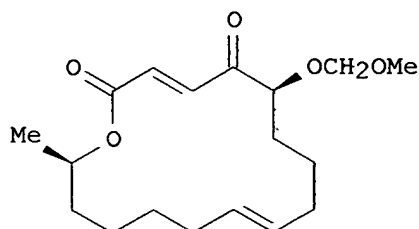
creating functional diversity using the aforementioned complexes to catalyze cross-**metathesis** reactions of a first olefinic reactant, which may or may not be substituted with a functional group, with each of a plurality of different olefinic reactants, which may or may not be substituted with functional groups, to give a plurality of structurally distinct olefinic products. The methodol. of the invention is also useful in facilitating the stereoselective synthesis of 1,2-disubstituted olefins in the cis configuration. In a typical example of the synthesis of substituted allylic olefins, allyldiphenylphosphine oxide and $\text{RuCl}_2(\text{:CHPh})(\text{IMesH}_2)(\text{PCy}_3)$ (synthetic prepn. given) [$\text{IMesH} = (\text{I})$] are added to cis-2-butene-1,4-diacetate to give 90% of the cross product.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
TI Synthesis of Symmetrical Trisubstituted Olefins by Cross
 Metathesis
AN 2002:335132 CAPLUS
DN 137:62904
TI Synthesis of Symmetrical Trisubstituted Olefins by Cross
 Metathesis
AU Chatterjee, Arnab K.; Sanders, Daniel P.; Grubbs, Robert H.
CS The Arnold and Mabel Beckman Laboratory of Chemical Synthesis, Division of
 Chemistry and Chemical Engineering, California Institute of Technology,
 Pasadena, CA, 91125, USA
SO Organic Letters (2002), 4(11), 1939-1942
 CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society
DT Journal
LA English
OS CASREACT 137:62904
AB Trisubstituted alkenes have been prepd. via intermol. olefin cross-
 metathesis (CM) between .alpha.-olefins and sym. 1,1-disubstituted
 olefins using an imidazolylidene **ruthenium** benzylidene complex.
 Of particular interest is the synthesis of isoprenoid/prenyl groups by a
 simple solvent-free CM reaction with isobutylene. In addn., prenyl groups
 can also be installed by a cross-**metathesis** of 2-methyl-2-butene
 with a variety of .alpha.-olefins at room temp. with low catalyst
 loadings.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
TI A rapid formal synthesis of the macrolide (-)-A26771B
AN 2001:167330 CAPLUS
DN 135:5470
TI A rapid formal synthesis of the macrolide (-)-A26771B
AU Lee, W.-W.; Shin, H. J.; Chang, S.
CS Department of Chemistry, Ewha Womans University, Seoul, 120-750, S. Korea
SO Tetrahedron: Asymmetry (2001), 12(1), 29-31
 CODEN: TASYE3; ISSN: 0957-4166
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 135:5470
GI



I

AB (-)-A26771B, a novel 16-membered macrolide with antibiotic activity, has been formally synthesized. In the synthesis **ruthenium** catalyzed ring-closing olefin **metathesis** (RCM) was used as a key reaction to construct the lactone ring I.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene
AN 1999:265988 CAPLUS
DN 130:267876
TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene
IN Schwab, Peter; Schulz, Michael
PA BASF A.-G., Germany
SO Ger. Offen., 12 pp.
CODEN: GWXXBX
DT Patent
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19746040	A1	19990422	DE 1997-19746040	19971017
	TW 426651	B	20010321	TW 1998-87116887	19981012
				DE 1997-19746040A	19971017
	EP 915072	A1	19990512	EP 1998-119484	19981015
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2249019	AA	19990417	DE 1997-19746040A	19971017
				CA 1998-2249019	19981016
				DE 1997-19746040A	19971017
	JP 11217340	A2	19990810	JP 1998-295739	19981016
				DE 1997-19746040A	19971017
	CN 1218787	A	19990609	CN 1998-124565	19981017
				DE 1997-19746040A	19971017
AB	Propene (I) is prepd in high yield and selectivity without the need for the use of excess quantities of ethylene in a process comprising: (A) the metathesis of mixts. of 1-butene, 2-butene, and isobutene in the presence of a catalyst system contg. .gtoreq.1 of Group VIB and/or Group VIIB (e.g., Re2O7/Al2O3) and/or Group VIII element compd(s). forming a mixt. of propene, 2-pentenenes and 2-methyl-2-butene; (B) sepg. the I from the 2-pentenenes and 2-methyl-2-butene mixt.; (C) subjecting the mixt. of 2-pentenenes and 2-methyl-2-butene to metathesis with ethylene to form a mixt. of I, 1-butene, and isobutene; (D) sepg. the I from the mixt. of 1-butene and isobutene; and recycling the 1-butene and isobutene to step A. Process flow diagrams are presented.				

L9 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
TI Catalytic homologation of olefins to higher and lower olefins: a

metathesis related reaction
AN 1985:148672 CAPLUS
DN 102:148672
TI Catalytic homologation of olefins to higher and lower olefins: a
metathesis related reaction
AU Leconte, M.; Theolier, A.; Basset, J. M.
CS Inst. Rech. Catal., CNRS, Villeurbanne, 69626, Fr.
SO Journal of Molecular Catalysis (1985), 28(1-3), 217-31
CODEN: JMCADS; ISSN: 0304-5102
DT Journal
LA English
AB With Fe-SiO₂, Ru-SiO₂ and Os-SiO₂ ethylene, propene,
and isobutene disproportionated at 200-300.degree. to yield higher and
lower olefins and methane. The reaction is catalytic when H₂ is present.
The mechanism of C-C bond formation in this reaction and in
Fischer-Tropsch reactions using the above catalysts was the same.

=> carbene

12280 CARBENE
7187 CARBENES
L10 14398 CARBENE
(CARBENE OR CARBENES)

=> dhis

L11 18 DHIS

=> d his

(FILE 'HOME' ENTERED AT 10:26:03 ON 12 SEP 2003)

FILE 'REGISTRY' ENTERED AT 10:26:31 ON 12 SEP 2003

E 2-METHYL-2-BUTENE/CN

L1 1 E3

FILE 'CAPLUS' ENTERED AT 10:27:16 ON 12 SEP 2003

L2 4102 L1
L3 11221 METATHESIS
L4 27 L2 AND L3
L5 91536 RUTHENIUM OR RU
L6 35651 OSMIUM OR OS
L7 115781 L5 OR L6
L8 91536 L5 AND L7
L9 5 L4 AND L7
L10 14398 CARBENE
L11 18 DHIS

=> l4 and l10

L12 4 L4 AND L10

=> l12 not l9

L13 3 L12 NOT L9

=> d l12 1-4 ti fbib abs

L12 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

TI Preparation of ruthenium alkylidene complexes as catalysts for cross-
metathesis reactions of functionalized and substituted olefins

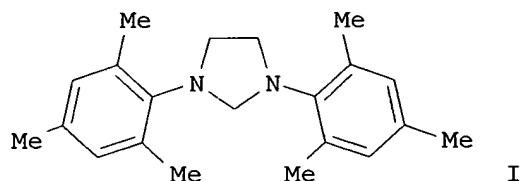
AN 2002:777864 CAPLUS

DN 137:295099

TI Preparation of ruthenium alkylidene complexes as catalysts for cross-
metathesis reactions of functionalized and substituted olefins

IN Grubbs, Robert H.; Chatterjee, Arnab K.; Choi, Tae-Lim; Goldberg, Steven D.; Love, Jennifer A.; Morgan, John P.; Sanders, Daniel P.; Scholl, Matthias; Toste, F. Dean; Trnka, Tina M.
 PA California Institute of Technology, USA
 SO PCT Int. Appl., 68 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2002079126	A1	20021010	WO 2002-US10196	20020401	
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
				US 2001-280462PP	20010330	
				US 2001-280590PP	20010330	
				US 2001-284213PP	20010416	
				US 2001-285597PP	20010420	
				US 2001-340588PP	20011214	
	US 2003100776	A1	20030529	US 2002-114418	20020401	
				US 2001-280462PP	20010330	
				US 2001-280590PP	20010330	
				US 2001-284213PP	20010416	
				US 2001-285597PP	20010420	
				US 2001-340588PP	20011214	
OS	MARPAT 137:295099					
GI						



AB The invention pertains to the use of Group 8 transition metal **carbene** complexes as catalysts for olefin cross-~~metathesis~~ reactions. In particular, ruthenium and osmium alkylidene complexes substituted with an N-heterocyclic **carbene** ligand are used to catalyze cross-~~metathesis~~ reactions to provide a variety of substituted and functionalized olefins, including phosphonate-substituted olefins, directly halogenated olefins, 1,1,2-trisubstituted olefins, and quaternary allylic olefins. The invention further provides a method for creating functional diversity using the aforementioned complexes to catalyze cross-~~metathesis~~ reactions of a first olefinic reactant, which may or may not be substituted with a functional group, with each of a plurality of different olefinic reactants, which may or may not be substituted with functional groups, to give a plurality of structurally distinct olefinic products. The methodol. of the invention is also useful in facilitating the stereoselective synthesis of 1,2-disubstituted olefins

in the cis configuration. In a typical example of the synthesis of substituted allylic olefins, allyldiphenylphosphine oxide and $\text{RuCl}_2(\text{:CHPh})(\text{IMesH}_2)(\text{PCy}_3)$ (synthetic prepn. given) [$\text{IMesH} = (\text{I})$] are added to cis-2-butene-1,4-diacetate to give 90% of the cross product.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis and catalytic properties of $\text{W}(\text{OAr})_2\text{Cl}_2(\text{CHCMe}_3)(\text{OR}_2)$ and $\text{W}(\text{OAr})_2\text{Cl}(\text{CHCMe}_3)(\text{CH}_2\text{CMe}_3)(\text{OR}_2)$ ($\text{Ar} = 2,6\text{-disubstituted phenyl}$; $\text{R} = \text{Et}$ or CHMe_2), new unicomponent catalysts for **metathesis** of acyclic and cyclic olefins, with or without functional groups

AN 1986:460720 CAPLUS

DN 105:60720

TI Synthesis and catalytic properties of $\text{W}(\text{OAr})_2\text{Cl}_2(\text{CHCMe}_3)(\text{OR}_2)$ and $\text{W}(\text{OAr})_2\text{Cl}(\text{CHCMe}_3)(\text{CH}_2\text{CMe}_3)(\text{OR}_2)$ ($\text{Ar} = 2,6\text{-disubstituted phenyl}$; $\text{R} = \text{Et}$ or CHMe_2), new unicomponent catalysts for **metathesis** of acyclic and cyclic olefins, with or without functional groups

AU Quignard, Francoise; Leconte, Michel; Basset, Jean Marie

CS Inst. Rech. Catal., Univ. Claude Bernard, Villeurbanne, 69626, Fr.

SO Journal of the Chemical Society, Chemical Communications (1985), (24), 1816-17

CODEN: JCCCAT; ISSN: 0022-4936

DT Journal

LA English

OS CASREACT 105:60720

AB Reaction of $(2,6\text{-R}_2\text{C}_6\text{H}_3\text{O})_2\text{WCl}_4$ (I ; $\text{R} = \text{Ph}, \text{Cl}, \text{Br}$) with 1 equiv $(\text{Me}_3\text{CCH}_2)_2\text{MgLi}$ (II ; $\text{L} = \text{dioxane}$) in Et_2O gave the corresponding $(2,6\text{-R}_2\text{C}_6\text{H}_3\text{O})_2\text{WCl}_2(\text{CHCMe}_3)(\text{OEt}_2)$ (III), whereas when 1.5 equiv of II was reacted with I ($\text{R} = \text{Ph}, \text{Cl}, \text{Me}, \text{F}$) in Et_2O , $(2,6\text{-R}_2\text{C}_6\text{H}_3\text{O})_2\text{WCl}(\text{CHCMe}_3)(\text{CH}_2\text{CMe}_3)(\text{OR}_1)_2$ (IV ; $\text{R} = \text{Ph}, \text{Cl}, \text{Me}, \text{F}$, $\text{R}_1 = \text{Et}$) were obtained. Ether exchange occurred at room temp. when IV ($\text{R} = \text{Ph}, \text{Cl}, \text{F}$, $\text{R}_1 = \text{Et}$) was reacted with $(\text{Me}_2\text{CH})_2\text{O}$ giving IV ($\text{R} = \text{Ph}, \text{Cl}, \text{F}$, $\text{R}_1 = \text{CHMe}_2$). These W complexes are the 1st examples of well defined, Lewis acid-free, homogeneous olefin **metathesis** catalysts, for which the activity and stereoselectivity is detd. by the nature of the aryloxo ligand and of the coordinated ether and which show a wide range of potential applications.

L12 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

TI Reactions of the metal **carbenes** FeCH_2^+ and CoCH_2^+ with olefins in the gas phase. Studies involving olefin **metathesis**

AN 1985:166909 CAPLUS

DN 102:166909

TI Reactions of the metal **carbenes** FeCH_2^+ and CoCH_2^+ with olefins in the gas phase. Studies involving olefin **metathesis**

AU Jacobson, D. B.; Freiser, B. S.

CS Dep. Chem., Purdue Univ., West Lafayette, IN, 47907, USA

SO Journal of the American Chemical Society (1985), 107(9), 2605-12

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

AB Reactions of the title **carbenes** with several olefins and alkynes are reported. Ethene reacts with MCH_2^+ , yielding exclusively M^+ formation (C_3H_6 elimination). Reaction of ethene with MCD_2^+ yields the **metathesis** products FeCH_2^+ and CoCH_2^+ in 20% and 2% yields, resp. Formation of the **metathesis** product MC_2H_4^+ dominates for propene with no MCH_2^+ produced from MCD_2^+ . Formation of MC_2H_4^+ is believed to proceed through an ethene-ethylidene intermediate that rearranges to a bis(ethene) complex followed by elimination of ethene. Absence of MCH_2^+ formation from reaction of MCD_2^+ with propene suggests that the alkene-alkylidene conversion is the key step in **metathesis** of

olefins larger than ethene. Several other pathways compete with **metathesis** such as cyclopropanation, olefin homologation, dehydrogenation, and various C-C bond cleavages. Both **carbenes** react with butadiene generating M-c-C₅H₆⁺ and M-c-C₅H₅⁺. Formation of Fe-c-C₅H₅⁺ implies D.degree. (Fe-C₅H₅) > 93 kcal/mol. Finally, ethyne and propyne react with MCH₂⁺ to yield M⁺ as the only product.

L12 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Reactions of benzyldiene pentacarbonyltungsten with alkenes
 AN 1980:75459 CAPLUS
 DN 92:75459
 TI Reactions of benzyldiene pentacarbonyltungsten with alkenes
 AU Casey, Charles P.; Polichnowski, Stanley W.; Shusterman, Alan J.; Jones, Carol R.
 CS Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA
 SO Journal of the American Chemical Society (1979), 101(24), 7282-92
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA English
 AB The title reactions at -78.degree. gave phenylcyclopropanes and no **metathesis** products. The relative reactivity of the alkenes was CH₂:CMe₂ > CH₂:CHMe .mchgt. C₂H₄, indicating that the reaction involved electrophilic attack of the **carbene** complex on the alkene. The stereochem. of cyclopropane formation was explained in terms of a transition state which involved formation of a bond from the **carbene** C of PhCHW(CO)₅ to the less substituted end of an alkene and interaction of the pos. polarized, more substituted end with the ipso C of the Ph group.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	51.60	58.11
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.86	-5.86

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PASSWORD:

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NEWS 2	"Ask CAS" for self-help around the clock
NEWS 3 SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS 4 Jul 15	Data from 1960-1976 added to RDISCLOSURE

NEWS 5 Jul 21 Identification of STN records implemented
 NEWS 6 Jul 21 Polymer class term count added to REGISTRY
 NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and
 Right Truncation available
 NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
 August 1, 2003
 NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN
 NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in
 September 2003
 NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in
 September 2003
 NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in
 September 2003
 NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in
 September 2003
 NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE
 NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL
 NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right
 Truncation
 NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR
 NEWS 18 SEP 22 DIPPR file reloaded

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 MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
 AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
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***** STN Columbus *****

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:07:50 ON 22 SEP 2003

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 DICTIONARY FILE UPDATES: 21 SEP 2003 HIGHEST RN 590345-44-1

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when,
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.40	0.61

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:08:01 ON 22 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 14:10:53 ON 22 SEP 2003
FILE 'REGISTRY' ENTERED AT 14:10:53 ON 22 SEP 2003
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.40	0.61

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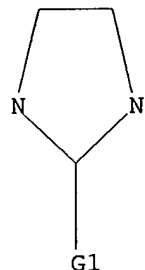
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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS

L1 STR



G1 Os,Ru

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 860 TO ITERATE

100.0% PROCESSED 860 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 15441 TO 18959
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> search l1 sss full
FULL SEARCH INITIATED 14:11:33 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 17578 TO ITERATE

100.0% PROCESSED 17578 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.02

L3 0 SEA SSS FUL L1

=>
Uploading 09891144 metal ligand.str

L4 STRUCTURE UPLOADED

=> search l1 sss sam
SAMPLE SEARCH INITIATED 14:12:38 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 860 TO ITERATE

100.0% PROCESSED 860 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 15441 TO 18959
PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L1

=> search l1 sss full
FULL SEARCH INITIATED 14:12:46 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 17578 TO ITERATE

100.0% PROCESSED 17578 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L6 0 SEA SSS FUL L1

=> logoff hold		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	296.70	296.91

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:12:58 ON 22 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS	4	Jul 15	Data from 1960-1976 added to RDISCLOSURE
NEWS	5	Jul 21	Identification of STN records implemented
NEWS	6	Jul 21	Polymer class term count added to REGISTRY
NEWS	7	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS	8	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS	9	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS	10	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS	11	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
NEWS	12	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
NEWS	13	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
NEWS	14	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS	15	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS	16	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation
NEWS	17	AUG 18	Simultaneous left and right truncation added to ANABSTR
NEWS	18	SEP 22	DIPPR file reloaded
NEWS	19	SEP 25	INPADOC: Legal Status data to be reloaded
NEWS EXPRESS			April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 08:31:44 ON 27 SEP 2003

=> file reg
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 08:31:52 ON 27 SEP 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5
DICTIONARY FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

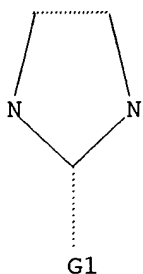
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27; Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>
Uploading 09891144 metal ligand.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 Os,Ru

Structure attributes must be viewed using STN Express query preparation.

=> search l1 sss sam
SAMPLE SEARCH INITIATED 08:32:20 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

100.0% PROCESSED 859 ITERATIONS
SEARCH TIME: 00.00.01

7 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 15422 TO 18938
PROJECTED ANSWERS: 7 TO 298

L2 7 SEA SSS SAM L1

=> dscan

0 DSCAN
L3 0 DSCAN

=> search l1 sss sam

SAMPLE SEARCH INITIATED 08:32:30 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

100.0% PROCESSED 859 ITERATIONS
SEARCH TIME: 00.00.01

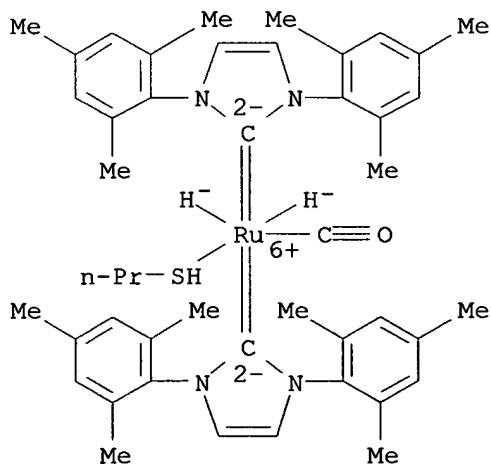
7 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 15422 TO 18938
PROJECTED ANSWERS: 7 TO 298

L4 7 SEA SSS SAM L1

=> d scan

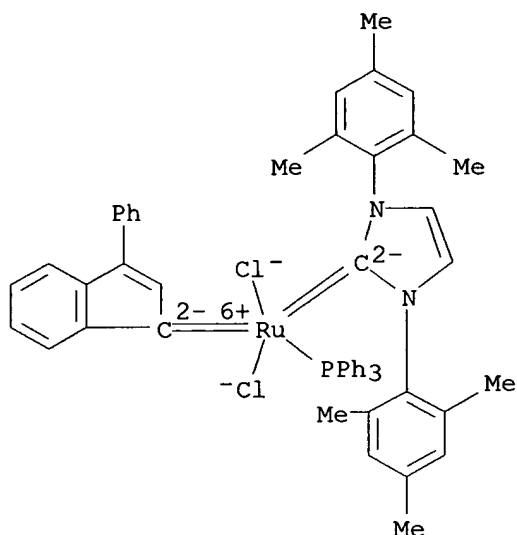
L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Ruthenium, carbonylbis[1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene]dihydro(1-propanethiol)-, (OC-6-23)- (9CI)
MF C46 H58 N4 O Ru S
CI CCS



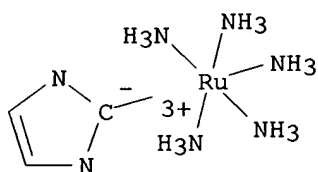
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):7

L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Ruthenium, dichloro[1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene](3-phenyl-1H-inden-1-ylidene)(triphenylphosphine)-, (SP-5-41)- (9CI)

MF C54 H49 Cl2 N2 P Ru
 CI CCS



L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
 IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, conjugate monoacid,
 (OC-6-21)- (9CI)
 MF C3 H18 N7 Ru . H
 CI CCS

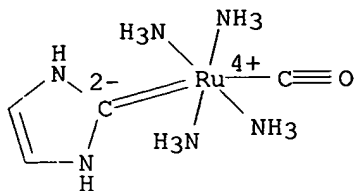


● H⁺

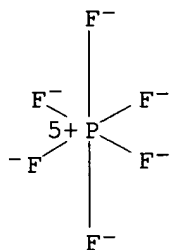
*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
 IN Ruthenium(2+), tetraamminecarbonyl(1,3-dihydro-2H-imidazol-2-ylidene)-,
 bis[hexafluorophosphate(1-)] (9CI)
 MF C4 H16 N6 O Ru . 2 F6 P

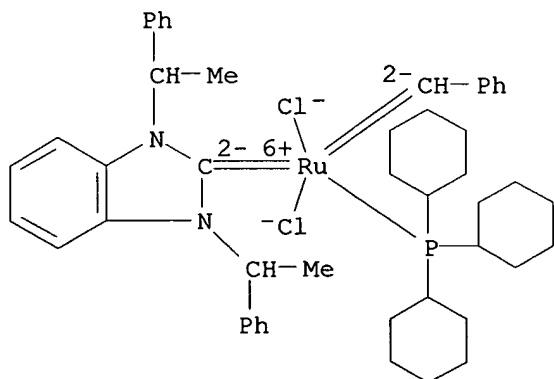
CM 1



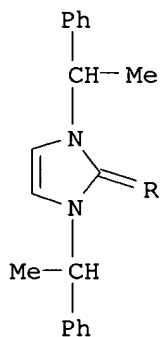
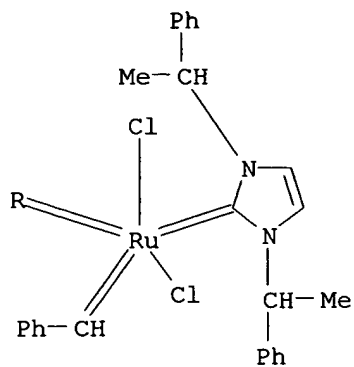
CM 2



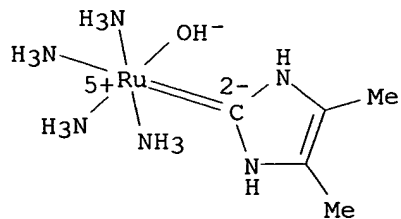
L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
 IN Ruthenium, dichloro[rel-1,3-dihydro-1,3-bis[(1R)-1-phenylethyl]-2H-benzimidazol-2-ylidene] (phenylmethylene) (tricyclohexylphosphine)-, (SP-5-41)- (9CI)
 MF C48 H61 Cl2 N2 P Ru
 CI CCS



L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
 IN Ruthenium, dichlorobis[1,3-dihydro-1,3-bis(1-phenylethyl)-2H-imidazol-2-ylidene] (phenylmethylene)-, (SP-5-31)- (9CI)
 MF C45 H46 Cl2 N4 Ru



L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
 IN Ruthenium(2+), tetraammine(1,3-dihydro-4,5-dimethyl-2H-imidazole-2-ylidene)hydroxy-, (OC-6-32)- (9CI)
 MF C5 H21 N6 O Ru
 CI CCS



ALL ANSWERS HAVE BEEN SCANNED

=>

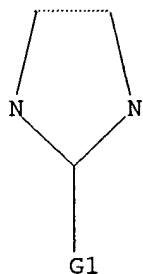
Uploading 09891144 metal_ligand.str

L5 STRUCTURE UPLOADED

=> d l5

L5 HAS NO ANSWERS

L5 STR



G1 Os,Ru

Structure attributes must be viewed using STN Express query preparation.

=> search l5 sss sam

SAMPLE SEARCH INITIATED 08:33:59 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

100.0% PROCESSED 859 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 15422 TO 18938

PROJECTED ANSWERS: 1 TO 80

L6 1 SEA SSS SAM L5

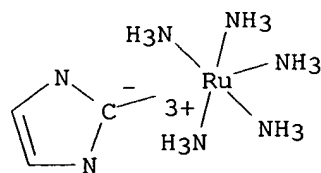
=> d scan

L6 1 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, conjugate monoacid,
(OC-6-21)- (9CI)

MF C3 H18 N7 Ru . H

CI CCS



● H⁺

*** FRAGMENT DIAGRAM IS INCOMPLETE ***

ALL ANSWERS HAVE BEEN SCANNED

=> search l5 sss full
FULL SEARCH INITIATED 08:34:31 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 17609 TO ITERATE

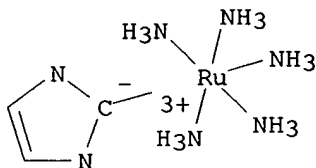
100.0% PROCESSED 17609 ITERATIONS
SEARCH TIME: 00.00.01

2 ANSWERS

L7 2 SEA SSS FUL L5

=> d scan

L7 2 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, conjugate monoacid,
(OC-6-21)- (9CI)
MF C3 H18 N7 Ru . H
CI CCS

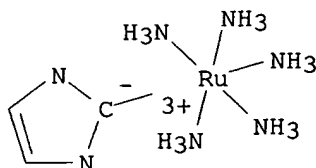


● H⁺

*** FRAGMENT DIAGRAM IS INCOMPLETE ***

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L7 2 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, (OC-6-21)- (9CI)
MF C3 H18 N7 Ru
CI CCS, COM



*** FRAGMENT DIAGRAM IS INCOMPLETE ***

ALL ANSWERS HAVE BEEN SCANNED

=> logoff hold\

'HOLD\' IS NOT VALID HERE
For an explanation, enter "HELP LOGOFF".

=> logoff hold

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
154.37	154.58

FULL ESTIMATED COST

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:35:13 ON 27 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 08:44:18 ON 27 SEP 2003
FILE 'REGISTRY' ENTERED AT 08:44:18 ON 27 SEP 2003
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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
154.37	154.58

FULL ESTIMATED COST

=>

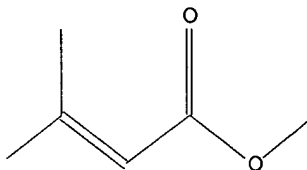
Uploading 09891144 1 trisubstitued olefin.str

L8 STRUCTURE UPLOADED

=> d l8

L8 HAS NO ANSWERS

L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l8 exact full

FULL SEARCH INITIATED 08:45:39 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 808 TO ITERATE

100.0% PROCESSED 808 ITERATIONS
SEARCH TIME: 00.00.01

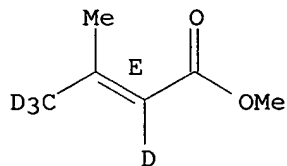
14 ANSWERS

L9 14 SEA EXA FUL L8

=> d scan

L9 14 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN 2-Butenoic-2,4,4,4-d4 acid, 3-methyl-, methyl ester, (E)- (9CI)
MF C6 H6 D4 O2

Double bond geometry as shown.



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

205.32

205.53

FILE 'CAPLUS' ENTERED AT 08:46:16 ON 27 SEP 2003

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FILE COVERS 1907 - 27 Sep 2003 VOL 139 ISS 14

FILE LAST UPDATED: 26 Sep 2003 (20030926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 19

L10 334 L9

=> methathesis

L11 157 METHATHESIS

=> metathathesis

0 METATHATHESIS

L12 0 METATHATHESIS

=> metathesis

11215 METATHESIS

159 METATHESES

L13 11263 METATHESIS

(METATHESIS OR METATHESES)

=> l10 and l13
L14 2 L10 AND L13

=> d l14 1-2 ti fbib abs

L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
TI Heterogeneous **metathesis** of unsaturated esters using a
rhenium-based catalyst
AN 1984:51004 CAPLUS
DN 100:51004
TI Heterogeneous **metathesis** of unsaturated esters using a
rhenium-based catalyst
AU Bosma, R. H. A.; Van den Aardweg, G. C. N.; Mol, J. C.
CS Inst. Chem. Technol., Univ. Amsterdam, Amsterdam, 1018 TV, Neth.
SO Journal of Organometallic Chemistry (1983), 255(2), 159-71
CODEN: JORCAI; ISSN: 0022-328X
DT Journal
LA English
OS CASREACT 100:51004
AB The heterogeneous **metathesis** of unsatd. esters was carried out
at room temp., using the catalyst system Re2O7/Al2O3 with an
organometallic compd. as cocatalyst. The influence of several parameters
on the activity of the catalyst was studied with Me oleate as substrate.
The use of a nonpolar solvent and a cocatalyst of general formula SnR4 (R
= n-alkyl) provided optimal reaction conditions. The activity of a
deactivated catalyst could be completely restored by recalcination in O
followed by addn. of cocatalyst. The reactivities of various unsatd.
esters as a function of their mol. structure was studied; these esters
undergo **metathesis** when the double bond and the carboxylic group
are sepd. by at least one methylene group. In general,
.alpha.,.beta.-unsatd. esters show a reasonable activity for cometathesis
with simple alkenes, such as E-3-hexene.

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
TI Cyclopropane-olefin cross **metathesis**
AN 1977:4491 CAPLUS
DN 86:4491
TI Cyclopropane-olefin cross **metathesis**
AU Gassman, Paul G.; Johnson, Thomas H.
CS Dep. Chem., Univ. Minnesota, Minneapolis, MN, USA
SO Journal of the American Chemical Society (1976), 98(19), 6058-9
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
AB A divalent C fragment can be transferred from an alkyl-substituted
cyclopropane to an .alpha.,.beta.-unsatd. ester or nitrile to yield an
alkene and an electron-deficient cyclopropane. This cyclopropane-olefin
cross **metathesis** can be accomplished by utilizing the complex
formed from PhWCl3 and either AlCl3 or EtAlCl2 (1:1) as catalyst. It is
proposed that the catalyst system reacts with the alkyl-substituted
cyclopropane to yield a highly nucleophilic metal carbenoid intermediate,
which then adds to any Michael acceptor present in soln. Six Michael
acceptors were studied. The mechanistic implications of these results are
presented.

=> save temp all metathesis/l
L# LIST L1-L14 HAS BEEN SAVED AS 'METATHESIS/L'

=> d his

(FILE 'HOME' ENTERED AT 08:31:44 ON 27 SEP 2003)

FILE 'REGISTRY' ENTERED AT 08:31:52 ON 27 SEP 2003

L1 STRUCTURE UPLOADED
L2 7 SEARCH L1 SSS SAM
L3 0 DSCAN
L4 7 SEARCH L1 SSS SAM
L5 STRUCTURE UPLOADED
L6 1 SEARCH L5 SSS SAM
L7 2 SEARCH L5 SSS FULL
L8 STRUCTURE UPLOADED
L9 14 SEARCH L8 EXACT FULL

FILE 'CAPLUS' ENTERED AT 08:46:16 ON 27 SEP 2003

L10 334 L9
L11 157 METHATHESIS
L12 0 METATHATHESIS
L13 11263 METATHESIS
L14 2 L10 AND L13
SAVE TEMP ALL METATHESIS/L

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.75	219.28

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.30	-1.30

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:51:27 ON 27 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
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NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in

September 2003

NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in September 2003

NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in September 2003

NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE

NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL

NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation

NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR

NEWS 18 SEP 22 DIPPR file reloaded

NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS INTER General Internet Information

NEWS LOGIN Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 07:44:50 ON 28 SEP 2003

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.84	0.84

FILE 'STNGUIDE' ENTERED AT 07:47:16 ON 28 SEP 2003

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 AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Sep 26, 2003 (20030926/UP).

=> DIS SAVED

NAME	CREATED	NOTES/TITLE
ACETALSRCH/L	TEMP	26 L-NUMBERS
ADAMANSRCH/L	TEMP	10 L-NUMBERS
ADAMANTPREP/A	TEMP	51 ANSWERS IN FILE CAPLUS
ADAMANTSP/A	TEMP	64 ANSWERS IN FILE CAPLUS
ALKYLATIN/L	13 DEC 2001	9 L-NUMBERS
CYCLIZATN/L	TEMP	10 L-NUMBERS
ESTERODOR/L	05 SEP 2002	42 L-NUMBERS
GENRCACETALS/A	TEMP	148 ANSWERS IN FILE CAPLUS
HALOSM/A	TEMP	1890 ANSWERS IN FILE CAPLUS
INDIUMCL3/A	30 MAY 2001	1 ANSWER IN FILE REGISTRY
LTWENTAUGFOR/A	04 AUG 2001	72 ANSWERS IN FILE CAPLUS

METATHESIS/L	TEMP	14 L-NUMBERS
NEOTAMECRYST/A	24 APR 2001	59 ANSWERS IN FILE CAPLUS
NOSEARCH/L	TEMP	18 L-NUMBERS
NVLARMFULGEN/A	19 APR 2001	196 ANSWERS IN FILE REGISTRY
POHBENZALDEH/A	10 JUL 2001	5519 ANSWERS IN FILE CAPLUS
PROSTACMPD15/A	01 AUG 2001	34 ANSWERS IN FILE CAPLUS
STILLEAPP/L	07 JAN 2002	17 L-NUMBERS
TWOAMINOPOLY/Q	16 APR 2001	UPLOADED STRUCTURE

=> DIS SAVED/S
NO SAVED SDI REQUESTS

=> ACT METATHESIS/L

```

L1          STR
L2 (        7)SEA FILE=REGISTRY SSS SAM L1
L3 (        0)SEA FILE=REGISTRY ABB=ON  PLU=ON  DSCAN
L4 (        7)SEA FILE=REGISTRY SSS SAM L1
L5          STR
L6 (        1)SEA FILE=REGISTRY SSS SAM L5
L7 (        2)SEA FILE=REGISTRY SSS FUL L5
L8          STR
L9 (       14)SEA FILE=REGISTRY EXA FUL L8
L10 (      334)SEA FILE=CAPLUS ABB=ON  PLU=ON  L9
L11 (     157)SEA FILE=CAPLUS ABB=ON  PLU=ON  METHATHESIS
L12 (        0)SEA FILE=CAPLUS ABB=ON  PLU=ON  METATHATHESIS
L13 (    11263)SEA FILE=CAPLUS ABB=ON  PLU=ON  METATHESIS
L14 (        2)SEA FILE=CAPLUS ABB=ON  PLU=ON  L10 AND L13

```

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.06	0.90

FILE 'CAPLUS' ENTERED AT 07:47:59 ON 28 SEP 2003
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FILE COVERS 1907 - 28 Sep 2003 VOL 139 ISS 14
FILE LAST UPDATED: 26 Sep 2003 (20030926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> file reg

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.42	1.32

FILE 'REGISTRY' ENTERED AT 07:48:09 ON 28 SEP 2003
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5
DICTIONARY FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e 2-2-butene/cn

E1	1	2-199-PROTEIN RAIDD (RIP-ASSOCIATED ICH-1/CED-3 HOMOLOGOUS P ROTEIN WITH A DEATH DOMAIN) (HUMAN CLONE HSDME38XX)/CN
E2	1	2-2 CAST IRON/CN
E3	0 -->	2-2-BUTENE/CN
E4	1	2-201-PEROXIDASE, GLUTATHIONE (HUMAN KIDNEY SELENIUM-DEPENDEN T REDUCED)/CN
E5	1	2-203-PROTEIN (MYTILUS EDULIS CLONE 14-1 ADHESIVE PRECURSOR FRAGMENT)/CN
E6	1	2-206-FIBROBLAST GROWTH FACTOR 4 (HUMAN PRECURSOR)/CN
E7	1	2-206-FIBROBLAST GROWTH FACTOR K (HUMAN CLONE KS3 PRECURSOR) /CN
E8	1	2-206-PROTEIN D54 (HUMAN ISOFORM +INS2)/CN
E9	1	2-207-GLIAL-ACTIVATING FACTOR GAF (HUMAN CLONE PGAF1 REDUCED) , 2-L-METHIONINE-/CN
E10	1	2-207-HYDRATASE, ALIPHATIC NITRILE (RHODOCOCCLUS STRAIN N-774 CLONE PYUK120 .ALPHA.-SUBUNIT REDUCED)/CN
E11	1	2-207-LIPOPROTEIN (BORRELIA GARINII GENE OSPC PRECURSOR)/CN
E12	1	2-207-PROTEIN PELLINO-3 (HUMAN)/CN

=> e 2-methyl-2-butene/cn

E1	1	2-METHYL-2-BUTENAL/CN
E2	1	2-METHYL-2-BUTENAMIDE/CN
E3	1 -->	2-METHYL-2-BUTENE/CN
E4	1	2-METHYL-2-BUTENE CATION RADICAL/CN
E5	1	2-METHYL-2-BUTENE COMPOUND WITH BROMINE (1:1)/CN
E6	1	2-METHYL-2-BUTENE COMPOUND WITH CHLORINE (1:1)/CN
E7	1	2-METHYL-2-BUTENE DIMER/CN
E8	1	2-METHYL-2-BUTENE OXIDE/CN
E9	1	2-METHYL-2-BUTENE RADICAL CATION/CN
E10	1	2-METHYL-2-BUTENE TRIMER/CN
E11	1	2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-CIS-2-PENTENE-PIPERY LENE COPOLYMER/CN
E12	1	2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-PIPERYLENE COPOLYMER /CN

=> e3

L15 1 2-METHYL-2-BUTENE/CN

=> e 2-methyl-propene/cn

E1	1	2-METHYL-P-QUATERPHENYL/CN
E2	1	2-METHYL-P-TERPHENYL/CN
E3	0 -->	2-METHYL-PROPENE/CN
E4	1	2-METHYL-PROPENE-1,3-BUTADIENE-2-METHYL-1-BUTENE POLYMER/CN
E5	1	2-METHYL-PYRIDINE OXIDE COMPLEX WITH IODIDE/CN
E6	1	2-METHYL-S-CYSTEINE METHYL ESTER HYDROCHLORIDE/CN
E7	1	2-METHYL-S-TRIAZINE-4,6-THIOL/CN
E8	1	2-METHYL-S-TRIAZOLO(1,5-A)PYRAZINE/CN
E9	1	2-METHYL-S-TRIAZOLO(1,5-A)PYRIMIDINE/CN
E10	1	2-METHYL-S-TRIAZOLO(1,5-B)PYRIDAZINE/CN
E11	1	2-METHYL-SEC-BUTYLBENZENE/CN
E12	1	2-METHYL-TERT-BUTYLBENZENE/CN

=> e isobutene/cn

E1	1	ISOBUTEN-1-ONE/CN
E2	1	ISOBUTENAL/CN
E3	1 -->	ISOBUTENE/CN
E4	1	ISOBUTENE CATION/CN
E5	1	ISOBUTENE CATION RADICAL/CN
E6	1	ISOBUTENE DIMER/CN
E7	1	ISOBUTENE DIMER RADICAL CATION/CN
E8	1	ISOBUTENE GLYCOL/CN
E9	1	ISOBUTENE HOMOPOLYMER/CN
E10	1	ISOBUTENE OXIDE/CN
E11	1	ISOBUTENE OXIDE POLYMER/CN
E12	1	ISOBUTENE OZONIDE/CN

=> e3

L16	1	ISOBUTENE/CN
-----	---	--------------

=> e propene/cn

E1	1	PROPENAL-2-VINYLPYRIDINE COPOLYMER/CN
E2	1	PROPENAMIDE/CN
E3	1 -->	PROPENE/CN
E4	1	PROPENE CATION RADICAL/CN
E5	1	PROPENE COMPOUND WITH CHLORINE (1:1)/CN
E6	1	PROPENE DICATION/CN
E7	1	PROPENE HEPTAMER/CN
E8	1	PROPENE HOMOPOLYMER/CN
E9	1	PROPENE ISOTACTIC POLYMER/CN
E10	1	PROPENE MONOOXYGENASE/CN
E11	1	PROPENE OCTAHYDRATE/CN
E12	1	PROPENE OXIDE/CN

=> e3

L17	1	PROPENE/CN
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=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.86	15.18

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FILE COVERS 1907 - 28 Sep 2003 VOL 139 ISS 14
FILE LAST UPDATED: 26 Sep 2003 (20030926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l15/prep

4107 L15
3056971 PREP/RL
L18 428 L15/PREP
(L15 (L) PREP/RL)

=> l16

L19 13922 L16

=> l17

L20 37158 L17

=> l19 and l20

L21 3908 L19 AND L20

=> l18 and l21

L22 60 L18 AND L21

=> carbene

12311 CARBENE
7206 CARBENES
L23 14436 CARBENE
(CARBENE OR CARBENES)

=> l22 and l23

L24 0 L22 AND L23

=> metathesis

11215 METATHESIS
159 METATHESES
L25 11263 METATHESIS
(METATHESIS OR METATHESES)

=> l22 and l25

L26 3 L22 AND L25

=> d l26 1-3 ti fbib abs

L26 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
TI Olefin **metathesis** in a distillation column reactor
AN 2003:485742 CAPLUS
DN 139:53456
TI Olefin **metathesis** in a distillation column reactor
IN Podrebarac, Gary G.
PA Catalytic Distillation Technologies, USA
SO U.S., 12 pp.
CODEN: USXXAM

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6583329	B1	20030624	US 1998-35174	19980304
				US 1998-35174	19980304

AB The **metathesis** process is carried out in a reaction distn. column for: (A) for the prodn. of propylene from the **metathesis** of 2-butene and ethylene; (B) for the prodn. of detergent-range olefins from the **metathesis** of C15 and heavier olefins with C9 and lighter olefins; (C) for the prodn. of 2-methyl-2-butene and propylene from the **metathesis** of 2-butene and isobutylene; and (D) for the prodn. of tetramethylethylene from the **metathesis** of isobutylene with itself and/or the reaction of diisobutylene with the ethylene produced to produce neohexene. Process flow diagrams are presented.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene

AN 1999:265988 CAPLUS

DN 130:267876

TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene

IN Schwab, Peter; Schulz, Michael

PA BASF A.-G., Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19746040	A1	19990422	DE 1997-19746040	19971017
	TW 426651	B	20010321	TW 1998-87116887	19981012
				DE 1997-19746040A	19971017
	EP 915072	A1	19990512	EP 1998-119484	19981015
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2249019	AA	19990417	DE 1997-19746040A	19971017
				CA 1998-2249019	19981016
				DE 1997-19746040A	19971017
	JP 11217340	A2	19990810	JP 1998-295739	19981016
				DE 1997-19746040A	19971017
	CN 1218787	A	19990609	CN 1998-124565	19981017
				DE 1997-19746040A	19971017

AB Propene (I) is prepd in high yield and selectivity without the need for the use of excess quantities of ethylene in a process comprising: (A) the **metathesis** of mixts. of 1-butene, 2-butene, and isobutene in the presence of a catalyst system contg. .gtoreq.1 of Group VIB and/or Group VIIB (e.g., Re2O7/Al2O3) and/or Group VIII element compd(s). forming a mixt. of propene, 2-pentenenes and 2-methyl-2-butene; (B) sepg. the I from the 2-pentenenes and 2-methyl-2-butene mixt.; (C) subjecting the mixt. of 2-pentenenes and 2-methyl-2-butene to **metathesis** with ethylene to form a mixt. of I, 1-butene, and isobutene; (D) sepg. the I from the mixt. of 1-butene and isobutene; and recycling the 1-butene and isobutene to step A. Process flow diagrams are presented.

L26 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

TI Catalytic homologation of olefins to higher and lower olefins: a

metathesis related reaction
 AN 1985:148672 CAPLUS
 DN 102:148672
 TI Catalytic homologation of olefins to higher and lower olefins: a
 metathesis related reaction
 AU Leconte, M.; Theolier, A.; Basset, J. M.
 CS Inst. Rech. Catal., CNRS, Villeurbanne, 69626, Fr.
 SO Journal of Molecular Catalysis (1985), 28(1-3), 217-31
 CODEN: JMCADS; ISSN: 0304-5102
 DT Journal
 LA English
 AB With Fe-SiO₂, Ru-SiO₂ and Os-SiO₂ ethylene, propene, and isobutene
 disproportionated at 200-300.degree. to yield higher and lower olefins and
 methane. The reaction is catalytic when H₂ is present. The mechanism of
 C-C bond formation in this reaction and in Fischer-Tropsch reactions using
 the above catalysts was the same.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	21.59	36.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 08:03:28 ON 28 SEP 2003

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PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
 SESSION RESUMED IN FILE 'CAPLUS' AT 08:17:32 ON 28 SEP 2003
 FILE 'CAPLUS' ENTERED AT 08:17:32 ON 28 SEP 2003
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	21.59	36.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

=> acrylonitrile

82693 ACRYLONITRILE
 935 ACRYLONITRILES
 L27 82949 ACRYLONITRILE
 (ACRYLONITRILE OR ACRYLONITRILES)

=> d his

(FILE 'HOME' ENTERED AT 07:44:50 ON 28 SEP 2003)

FILE 'STNGUIDE' ENTERED AT 07:47:16 ON 28 SEP 2003
ACT METATHESIS/L

L1 STR
L2 (7)SEA FILE=REGISTRY SSS SAM L1
L3 (0)SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN
L4 (7)SEA FILE=REGISTRY SSS SAM L1
L5 STR
L6 (1)SEA FILE=REGISTRY SSS SAM L5
L7 (2)SEA FILE=REGISTRY SSS FUL L5
L8 STR
L9 (14)SEA FILE=REGISTRY EXA FUL L8
L10 (334)SEA FILE=CAPLUS ABB=ON PLU=ON L9
L11 (157)SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS
L12 (0)SEA FILE=CAPLUS ABB=ON PLU=ON METATHATHESIS
L13 (11263)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS
L14 (2)SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND L13

FILE 'CAPLUS' ENTERED AT 07:47:59 ON 28 SEP 2003

FILE 'REGISTRY' ENTERED AT 07:48:09 ON 28 SEP 2003

E 2-2-BUTENE/CN
E 2-METHYL-2-BUTENE/CN
L15 1 E3
E 2-METHYL-PROPENE/CN
E ISOBUTENE/CN
L16 1 E3
E PROPENE/CN
L17 1 E3

FILE 'CAPLUS' ENTERED AT 07:50:09 ON 28 SEP 2003

L18 428 L15/PREP
L19 13922 L16
L20 37158 L17
L21 3908 L19 AND L20
L22 60 L18 AND L21
L23 14436 CARBENE
L24 0 L22 AND L23
L25 11263 METATHESIS
L26 3 L22 AND L25
L27 82949 ACRYLONITRILE

=> l13 and l27

11215 METATHESIS
159 METATHESES
11263 METATHESIS
(METATHESIS OR METATHESES)

L28 54 L13 AND L27

=> crowe

L29 145 CROWE

=> l28 and l29

L30 0 L28 AND L29

=> l23 and l28

L31 9 L23 AND L28

=> d l31 1-9 ti fbib abs

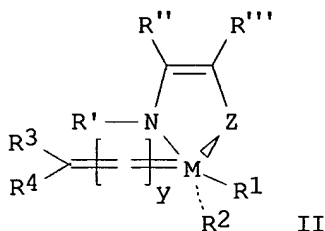
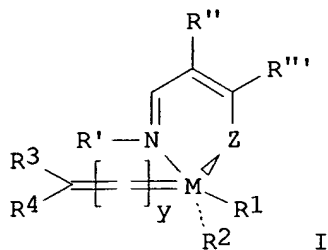
L31 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Metal **carbene** complexes, methods and intermediates for making
 them and their use in **metathesis** reactions
 AN 2003:568624 CAPLUS
 DN 139:133973
 TI Metal **carbene** complexes, methods and intermediates for making
 them and their use in **metathesis** reactions
 IN Verpoort, Francis Walter Cornelius; De Clercq, Bob
 PA Universiteit Gent, Belg.
 SO Eur. Pat. Appl., 44 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1329455	A1	20030723	EP 2002-75250	20020122
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	WO 2003062253	A1	20030731	WO 2003-BE8	20030122
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				EP 2002-75250 A	20020122
				US 2002-349956PP	20020201

PATENT FAMILY INFORMATION:

FAN 2003:591194

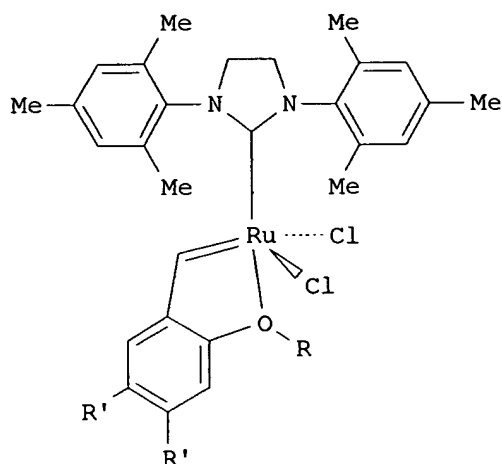
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003062253	A1	20030731	WO 2003-BE8	20030122
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				EP 2002-75250 A	20020122
				US 2002-349956PP	20020201
	EP 1329455	A1	20030723	EP 2002-75250	20020122
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
OS	MARPAT 139:133973				
GI					



AB Comps. having one of the general formulas I and II [wherein: M is a metal; Z is selected from the group consisting of O, S, NR''' and PR'''; R', '' and R''' are each a radical independently selected from H, C1-6 alkyl, C3-8 cycloalkyl, aryl and heteroaryl, or R' and R'' together form an aryl or heteroaryl radical, each said radical being optionally substituted; R5 is either as defined for R', R'' and R''' when included in a compd. having the general formula I or, when included in a compd. having the general formula II, is selected from H, C1-6 alkylene and C3-8 cycloalkylene, the said alkylene and cycloalkylene group being optionally substituted; R1 is a constraint steric hindrance group having a pKa of at least about 15; R2 is an anionic ligand; R3 and R4 are each H or a radical selected from, among others, C1-20 alkyl, C1-20 alkenyl; R3 and R4 together may form a fused arom. ring system, and y represents the no. of sp² carbon atoms between M and the carbon atom bearing R3 and R4 and is an integer from 0 to 3 inclusive] are useful as catalysts for olefin **metathesis** and atom transfer radical polymn.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
TI A good bargain: An inexpensive, air-stable ruthenium **metathesis** catalyst derived from .alpha.-asarone
AN 2003:246866 CAPLUS
DN 139:85476
TI A good bargain: An inexpensive, air-stable ruthenium **metathesis** catalyst derived from .alpha.-asarone
AU Grela, Karol; Kim, Mikhail
CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, 01224, Pol.
SO European Journal of Organic Chemistry (2003), (6), 963-966
CODEN: EJOCFK; ISSN: 1434-193X
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
GI



AB One-step synthesis of ruthenium **carbene** precatalyst (I) (R = CH₃, R' = OCH₃) from inexpensive .alpha.-asarone is described. This recyclable and easy to obtain complex I was used successfully in various types of **metathesis** reactions (RCM, CM, enyne) as a cheaper and more potent substitute of the Hoveyda-type precatalyst I (R = i-Pr, R' = H).

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN

TI Dendritic stars by ring-opening-**metathesis** polymerization from ruthenium-**carbene** initiators

AN 2003:116375 CAPLUS

DN 138:304572

TI Dendritic stars by ring-opening-**metathesis** polymerization from ruthenium-**carbene** initiators

AU Gatard, Sylvain; Nlate, Sylvain; Cloutet, Eric; Bravic, Georges; Blais, Jean-Claude; Astruc, Didier

CS LCOO, UMR CNRS 5802, Universite Bordeaux I, Talence, 33405, Fr.

SO Angewandte Chemie, International Edition (2003), 42(4), 452-456

CODEN: ACIEF5; ISSN: 1433-7851

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

AB Three generation of dendritic ruthenium-**carbene** complexes contg. chelating diphosphane was synthesized by extension of synthesis route of modeling a dendritic branch, the reversible dimerization of these complexes in concd. solns. Metallodendritic stars were formed by ring-opening -**metathesis** polymn. (ROMP) of norbornene using the complexes as initiator, and the dendritic effects of the initiator on the dimerization and polymn. were also investigated.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN

TI Structure and reactivity studies of the first tungsten cyanoalkylidene complex

AN 2002:356379 CAPLUS

DN 137:201406

TI Structure and reactivity studies of the first tungsten cyanoalkylidene complex

AU Cameron, Thomas M.; Gamble, A. Scott; Abboud, Khalil A.; Boncella, James

M.
 CS Department of Chemistry and Centre for Catalysis, University of Florida,
 Gainesville, FL, USA
 SO Chemical Communications (Cambridge, United Kingdom) (2002), (10),
 1148-1149
 CODEN: CHCOFS; ISSN: 1359-7345
 PB Royal Society of Chemistry
 DT Journal
 LA English
 OS CASREACT 137:201406
 AB Alkylidene complex $W(CHCMe_2Ph)(NAr)[OCMe(CF_3)_2]_2$ (Ar = 2, 6
 diisopropylphenyl) (4) reacts with one equiv. of **acrylonitrile**
 in CH_2Cl_2 to afford the tetrameric, cyanoalkylidene complex
 $[W(CHCN)(NAr)[OCMe(CF_3)_2]_2]_4$ (5) which reacts with excess MeCN to give
 tetrameric $[W(N(H)CMeC(CN)CMeN)(NAr)[OCMe(CF_3)_2]_2]_4$ (6). 5 And 6 were
 characterized by x-ray crystallog. 5 Reacts further with PMe_3 in CD_2Cl_2
 to give five-coordinate alkylidene complex, $W(CHCN)(PMe_3)(NAr)[OCMe(CF_3)_2]_2$
 which reacts with PhCHO to give trans-cinnamionitrile as an org. product.
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Substitution and Migratory Insertion Reactions of Square-Planar
 Allenylidene Iridium Complexes
 AN 2001:540828 CAPLUS
 DN 135:273065
 TI Substitution and Migratory Insertion Reactions of Square-Planar
 Allenylidene Iridium Complexes
 AU Ilg, Kerstin; Werner, Helmut
 CS Institut fuer Anorganische Chemie, Universitaet Wuerzburg, Wuerzburg,
 D-97074, Germany
 SO Organometallics (2001), 20(17), 3782-3794
 CODEN: ORGND7; ISSN: 0276-7333
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 135:273065
 AB (allenylidene)iridium(I) complexes $trans-[IrX\{C:C:C(Ph)R\}(PiPr_3)_2]$ [R =
 tBu, Ph; X = Br (5), I (6), NCO (7, 8), NCS (9, 10), OH (11, 12), N₃ (13,
 14)] were prep'd. from the corresponding chloro derivs.
 $trans-[IrCl\{C:C:C(Ph)R\}(PiPr_3)_2]$ (3, 4) by salt **metathesis**. An
 x-ray crystal structure anal. of 4 (R = Ph) confirmed the almost linear
 arrangement of the Ir-C-C-C chain. The azido compds. 13 (R = Ph) and 14
 (R = tBu) react with CO by migratory insertion of the allenylidene ligand
 into the Ir-N₃ bond. While $trans-[Ir\{C.tplbond.C-CR(Ph)N_3\}(CO)(PiPr_3)_2]$
 with R = tBu (16) is thermally stable, the related complex with R = Ph
 (15) rearranges slowly in benzene to the metalated **acrylonitrile**
 deriv. $trans-[Ir\{C(CN):CPh_2\}(CO)(PiPr_3)_2]$ (17) by elimination of N₂.
 Treatment of the phenolato compd. $trans-[Ir(OPh)\{C:C:C(Ph)tBu\}(PiPr_3)_2]$
 (19), obtained from the analogous hydroxo deriv. 12 and phenol, with CO
 also proceeds by migratory insertion and affords the functionalized
 (alkynyl)iridium(I) complex $trans-[Ir\{C.tplbond.C-$
 $CtBu(Ph)OPh\}(CO)(PiPr_3)_2]$ (20) in excellent yield. The Lewis basicity of
 the hydroxo compds. 11 and 12 was also illustrated by the reactions with
 CF_3CO_2H , $NEt_3.cntdot.3HF$, and $[pyH]BF_4$, which gave the substitution
 products $trans-[Ir(.kappa.1-O_2CCF_3)\{C:C:C(Ph)tBu\}(PiPr_3)_2]$ (21),
 $trans-[IrF\{C:C:CPh_2\}(PiPr_3)_2]$ (22), and $trans-$
 $[Ir\{C:C:C(Ph)tBu\}(py)(PiPr_3)_2]BF_4$ (23), resp. In MeOH soln., both 11 and
 12 react by complete fragmentation of 1 equiv of MeOH to afford the
 octahedral (allenyl)dihydrido-iridium(III) complexes
 $[IrH_2\{CH:C:C(Ph)R\}(CO)(PiPr_3)_2]$ (24, 25). An unprecedented type of
 insertion reaction occurs by treating the hydroxo derivs. 11 and 12 with

an excess of 1-alkynes R'C.tplbond.CH (R' = Ph, CO₂Me), which gives the novel five-coordinate Ir(III) compds. [Ir(C.tplbond.CR')₂{.eta.1-(E)-CH:CR'CH:C:C(Ph)R}(PiPr₃)₂] (26-29). From 26, 27 (R' = Ph), and CO, the octahedral 1:1 adducts 30 and 31 are formed. The mol. structures of 22 and 26 were detd. by x-ray crystallog.

RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

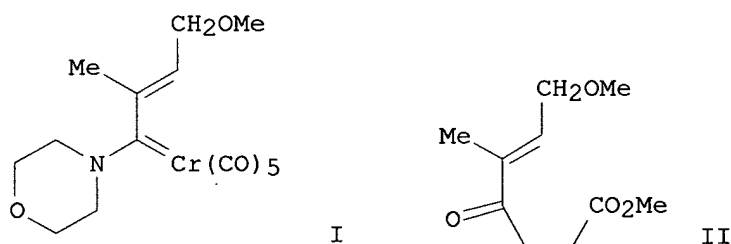
L31 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene** ruthenium complex
AN 2000:872572 CAPLUS
DN 134:207942
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene** ruthenium complex
AU Gessler, Simon; Randl, Stefan; Blechert, Siegfried
CS Institut fur Organische Chemie, Technische Universitat Berlin, Berlin, D-10623, Germany
SO Tetrahedron Letters (2000), 41(51), 9973-9976
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
AB Synthesis and activity in ring closure **metathesis** (RCM) and cross **metathesis** (CM) of the phosphine-free 1,3-dimesityl-2-imidazolidinylidene (IHMe) Ru alkoxybenzylidene complex ([RuCl₂(IHMe)(2-iPrOC₆H₄CH)]) are reported. The activities of the above complex and [RuCl₂(PCy₃)(CHPh)(IHMe)] were compared.
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
TI Azide migration and azide bridging: preparation of metalated **acrylonitriles** and of dinuclear complexes containing an almost linear eleven-membered C₃RhN₃RhC₃ chain
AN 1999:673764 CAPLUS
DN 132:23070
TI Azide migration and azide bridging: preparation of metalated **acrylonitriles** and of dinuclear complexes containing an almost linear eleven-membered C₃RhN₃RhC₃ chain
AU Laubender, Matthias; Werner, Helmut
CS Institut fur Anorganische Chemie der Universitat, Wurzburg, D-97074, Germany
SO Chemistry--A European Journal (1999), 5(10), 2937-2946
CODEN: CEUJED; ISSN: 0947-6539
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
OS CASREACT 132:23070
AB Isoelectronic square-planar azido- and isocyanatorhodium (I) complexes trans-[RhX(:C:C:CRR')(PiPr₃)₂] (X = N₃: 9-12; X = CNO: 13-16) were prepd. from the related chloro derivs. trans-[RhCl(:C:C:CRR')(PiPr₃)₂] by salt **metathesis**. A single-crystal x-ray diffraction study of 12 (R = Ph, R' = tBu) confirmed an almost linear arrangement of the Rh-C-C-C chain, but a significant bending of the Rh-N-N-N unit. In contrast to the isocyanato complexes 13-16, which are quite inert toward CO, the azido derivs. 9, 11 and 12 react with CO by migratory insertion of the allenylidene ligand into the Rh-N₃ bond. While the product obtained from 12 and CO, in which the N₃ substituent is linked to the .gamma.-C atom of the C₃ chain, is exceedingly stable, the corresponding species with R = R' = aryl are quite labile and rearrange to the metalated **acrylonitrile** compds. trans-[Rh(C(CN):CRR')(CO)(PiPr₃)₂] (19, 20)

by elimination of Me. The reactions of 19 and 20 (which was crystallog. characterized) with trifluoroacetic acid gave the corresponding **acrylonitriles** R'RC:CHCN in quant. yields. Treatment of the mononuclear compds. 9-12 with Meerwein's salt [Me3O]BF4 gave dinuclear [(PiPr3)2(R'RC:C:C)Rh2(.mu.-1,3-N3)]BF4 (21-24) contg. an almost linear eleven-membered C3RhN3RhC3 chain. The x-ray crystal structure anal. of 22 (R = Ph, R' = o-Tol) revealed that the conformations of the two halves of the cation are quite different and that the angle between the two metal-centered planes is 56.5(1).degree..

RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes
AN 1995:397673 CAPLUS
DN 122:187739
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes
AU Barluenga, Jose; Aznar, Fernando; Martin, Alfredo
CS Instituto Universitario de Quimica Organometalica Enrique Moles, Universidad de Oviedo, Oviedo, 33071, Spain
SO Organometallics (1995), 14(3), 1429-33
CODEN: ORGND7; ISSN: 0276-7333
PB American Chemical Society
DT Journal
LA English
OS CASREACT 122:187739
GI



AB A new method for the synthesis of Cr, Mo, and W Fischer-type vinylaminocarbenes, e.g., I, by the **metathesis** reaction of 2-amino-1,3-butadienes and phenyloxycarbenes is reported. The reaction of the vinylaminocarbenes with electron-deficient alkenes to afford, after hydrolysis, the vinyl ketones, e.g., II, was studied. To explain this behavior, a cyclopropanation process was proposed.

L31 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
TI Methylene exchange reactions catalyzed by alkylidene derivatives of titanium and phosphorus
AN 1981:423738 CAPLUS
DN 95:23738
TI Methylene exchange reactions catalyzed by alkylidene derivatives of titanium and phosphorus
AU Klabunde, U.; Tebbe, F. N.; Parshall, G. W.; Harlow, R. L.
CS Cent. Res. Dev. Dep., E. I. du Pont de Nemours and Co., Wilmington, DE, 19898, USA
SO Journal of Molecular Catalysis (1980), 8(1-3), 37-51

CODEN: JMCADS; ISSN: 0304-5102

DT Journal

LA English

AB Although olefin **metathesis** is generally catalyzed by compds. of Mo, W, or Re, alkylidene derivs. of Ti and of P also catalyze CH₂ exchange between olefins, the so-called degenerate **metathesis** reaction. In contrast to the metal-based catalysts, the P-based catalysts are effective with olefins in which the C:C bond is conjugated with a functional group such as CN or CO₂R. These new families of catalysts operate by an alkylidene-metallacycle mechanism like that for conventional olefin **metatheses**. The Ti system is used to study the individual steps in **metatheses** and to det. the role of the commonly used alkylaluminum cocatalyst. Titanacyclobutenes are isolated from the reactions of acetylenes with methylenetitanium complexes. The structures are detd. crystallog.

=> ruthenium or ru

74872 RUTHENIUM

20 RUTHENIUMS

74872 RUTHENIUM

(RUTHENIUM OR RUTHENIUMS)

57014 RU

185 RUS

57176 RU

(RU OR RUS)

L32 91812 RUTHENIUM OR RU

=> osmium or os

21403 OSMIUM

6 OSMIUMS

21405 OSMIUM

(OSMIUM OR OSMIUMS)

24377 OS

70 OSES

287 ORA

20 ORAS

13 OSAR

83 OSSA

24838 OS

(OS OR OSES OR ORA OR ORAS OR OSAR OR OSSA)

L33 35740 OSMIUM OR OS

=> l32 Or l33

MISSING OPERATOR L32 OR

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> l32 or l33

L34 116120 L32 OR L33

=> d his

(FILE 'HOME' ENTERED AT 07:44:50 ON 28 SEP 2003)

FILE 'STNGUIDE' ENTERED AT 07:47:16 ON 28 SEP 2003

ACT METATHESIS/L

L1 STR

L2 (7)SEA FILE=REGISTRY SSS SAM L1

L3 (0)SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN

L4 (7)SEA FILE=REGISTRY SSS SAM L1

L5 STR
 L6 (1)SEA FILE=REGISTRY SSS SAM L5
 L7 (2)SEA FILE=REGISTRY SSS FUL L5
 L8 STR
 L9 (14)SEA FILE=REGISTRY EXA FUL L8
 L10 (334)SEA FILE=CAPLUS ABB=ON PLU=ON L9
 L11 (157)SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS
 L12 (0)SEA FILE=CAPLUS ABB=ON PLU=ON METATHATHESIS
 L13 (11263)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS
 L14 (2)SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND L13

FILE 'CAPLUS' ENTERED AT 07:47:59 ON 28 SEP 2003

FILE 'REGISTRY' ENTERED AT 07:48:09 ON 28 SEP 2003

E 2-2-BUTENE/CN
 E 2-METHYL-2-BUTENE/CN
 L15 1 E3
 E 2-METHYL-PROPENE/CN
 E ISOBUTENE/CN
 L16 1 E3
 E PROPENE/CN
 L17 1 E3

FILE 'CAPLUS' ENTERED AT 07:50:09 ON 28 SEP 2003

L18 428 L15/PREP
 L19 13922 L16
 L20 37158 L17
 L21 3908 L19 AND L20
 L22 60 L18 AND L21
 L23 14436 CARBENE
 L24 0 L22 AND L23
 L25 11263 METATHESIS
 L26 3 L22 AND L25
 L27 82949 ACRYLONITRILE
 L28 54 L13 AND L27
 L29 145 CROWE
 L30 0 L28 AND L29
 L31 9 L23 AND L28
 L32 91812 RUTHENIUM OR RU
 L33 35740 OSMIUM OR OS
 L34 116120 L32 OR L33

=> 134 and 128

L35 13 L34 AND L28

=> 135 not 131

L36 8 L35 NOT L31

=> d 136 1-8 ti fbib abs

L36 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN

TI A highly efficient **ruthenium** catalyst for **metathesis** reactions

AN 2002:908270 CAPLUS

DN 138:254579

TI A highly efficient **ruthenium** catalyst for **metathesis** reactions

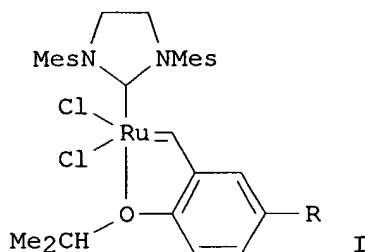
AU Grela, Karol; Harutyunyan, Syuzanna; Michrowska, Anna

CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, 01-224, Pol.

SO Angewandte Chemie, International Edition (2002), 41(21), 4038-4040

CODEN: ACIEF5; ISSN: 1433-7851

PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
OS CASREACT 138:254579
GI



AB The **ruthenium** alkylidene precatalyst I (R = NO₂, Mes = 2,4,6-trimethylphenyl), bearing an electron-withdrawing substituent, is more reactive than I (R = H, Br) in the cross **metathesis** (CM) of terminal alkenes, e.g., CH₂:CHCH₂CH₂NTsCH₂CH₂CH:CH₂. The cross **metathesis** of terminal alkenes and .alpha.,.beta.-unsatd. compds., e.g., Me₃CSiMe₂O(CH₂)₄CH:CH₂, can also be performed at room temp. E.g., cross **metathesis** of Me₃CSiMe₂O(CH₂)₄CH:CH₂ and MeCOCH:CH₂ gave Me₃CSiMe₂O(CH₂)₄CH:CHCOMe (E:Z = 99:1). I (R = NO₂, Mes = 2,4,6-trimethylphenyl) operates under very mild conditions and can be applied in various types of **metathesis** reactions (RCM, CM, enyne).

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN

TI A practical and highly active **ruthenium**-based catalyst that effects the cross **metathesis** of **acrylonitrile**

AN 2002:908269 CAPLUS

DN 138:153869

TI A practical and highly active **ruthenium**-based catalyst that effects the cross **metathesis** of **acrylonitrile**

AU Love, Jennifer A.; Morgan, John P.; Trnka, Tina M.; Grubbs, Robert H.
CS Arnold and Mabel Beckman Laboratory of Chemical Synthesis Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA, 91125, USA

SO Angewandte Chemie, International Edition (2002), 41(21), 4035-4037
CODEN: ACIEF5; ISSN: 1433-7851

PB Wiley-VCH Verlag GmbH & Co. KGaA

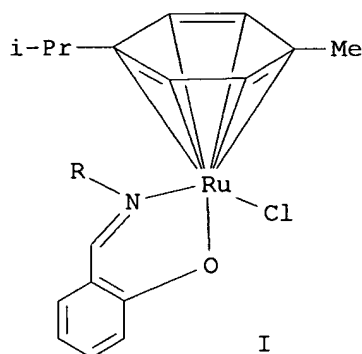
DT Journal

LA English

AB A series of **Ru**-based catalysts of general formula [(H₂IMes)(Cl)₂Ru(X)(A)] (A = benzylidene, salicylidene; X = PR₃ (R = Cy, Ph, p-CF₃C₆H₄), substituted (3-Br, 4-Ph) pyridines; H₂IMes = 1,3-bis(2,4,6-trimethylphenyl)imidazolidin-2-yl) were tested on their efficiency in cross **metathesis** of **acrylonitrile** and allylbenzene. Catalyst [(H₂IMes)(3-Br-py)₂(Cl)₂Ru=CHPh], prepd. from [(H₂IMes)(PCy₃)(Cl)₂Ru=CHPh] and 3-bromopyridine, exhibited best performance. ROMP of cyclooctadiene was also studied.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Ring-closing **metathesis**, Kharasch addition and enol ester
 synthesis catalysed by a novel class of **ruthenium(II)** complexes
 AN 2001:878871 CAPLUS
 DN 136:294329
 TI Ring-closing **metathesis**, Kharasch addition and enol ester
 synthesis catalysed by a novel class of **ruthenium(II)** complexes
 AU De Clercq, Bob; Verpoort, Francis
 CS Department of Inorganic and Physical Chemistry, Ghent University, Ghent,
 9000, Belg.
 SO Tetrahedron Letters (2001), 42(51), 8959-8963
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 GI

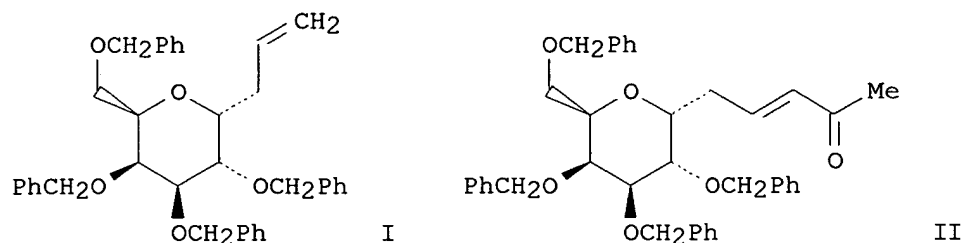


AB **Ruthenium** Schiff base complexes I (R = Me, t-Bu,
 4-Br-2,6-Me₂C₆H₂) mediated the Kharasch addn. of CCl₄ across olefins with
 high yields which markedly depended on the catalyst and the substrate
 used. In addn., ring-closing **metathesis** of some representative
 diolefins was carried out. The best catalytic system I (R =
 4-Br-2,6-Me₂C₆H₂) is able to form tri- and tetrasubstituted double bond
 products. Finally, dependent of the catalytic system and the reaction
 conditions used, these systems can catalyze the stereoselective formation
 of enol esters or enynes in excellent yields.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Highly efficient and recyclable polymer-bound catalyst for olefin
metathesis reactions
 AN 2001:775809 CAPLUS
 DN 136:183367
 TI Highly efficient and recyclable polymer-bound catalyst for olefin
metathesis reactions
 AU Randl, Stefan; Buschmann, Nicole; Connon, Stephen J.; Blechert, Siegfried
 CS Institut für Chemie, Technische Universität Berlin, Berlin, 10623, Germany
 SO Synlett (2001), (10), 1547-1550
 CODEN: SYNLES; ISSN: 0936-5214
 PB Georg Thieme Verlag
 DT Journal

LA English
OS CASREACT 136:183367
GI



AB Polymer-supported **ruthenium** isopropylphenylmethylidene catalysts contg. di(mesityl)imidazolidinylidene ligands have been prepd. as supported catalysts for the cross **metathesis** reactions of alkenes with electron deficient alkenes. While both supported catalysts gave high yields of ring-closing **metathesis** products when treated with diallylamine, the catalyst bound to Wang resin through the isopropoxyphenylmethylidene moiety gave cross-**metathesis** products with electron-deficient alkenes in significantly higher yields than the **ruthenium** catalyst bound to Merrifield resin through the di(mesityl)imidazolidinylidene ligand. The Wang-resin supported isopropoxyphenylmethylideneruthenium catalyst is the first supported catalyst for the cross-**metathesis** of alkenes and electron-deficient alkenes; the catalyst is robust, recyclable, highly active, and is compatible with a wide variety of functional groups. The alkenes produced by cross-**metathesis** reactions in the presence of the supported **ruthenium** catalysts have (E)-stereo with the exception of those formed by cross-**metathesis** reactions with **acrylonitrile** (3:1 Z:E) and acrolein (nonstereoselective). E.g., the Wang-resin supported isopropoxyphenylmethylideneruthenium catalyst was added to a soln. of the perbenzylated D-glycero-L-galactotri-deoxynonitol I and Me vinyl ketone in methylene chloride; the mixt. was stirred for 4-43 h to give the oxopentenyl sugar II in 98% yield.

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN

TI Cross-**metathesis** reaction. Generation of highly functionalized olefins from unsaturated alcohols

AN 2001:746735 CAPLUS

DN 136:183531

TI Cross-**metathesis** reaction. Generation of highly functionalized olefins from unsaturated alcohols

AU Cossy, J.; BouzBouz, S.; Hoveyda, A. H.

CS Laboratoire de Chimie Organique, CNRS, Paris, 75231, Fr.

SO Journal of Organometallic Chemistry (2001), 634(2), 216-221

CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier Science S.A.

DT Journal

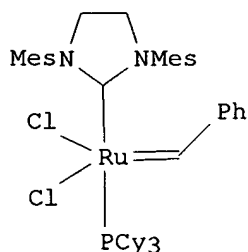
LA English

AB A cross-**metathesis** reaction was achieved between acid- and base-sensitive functionalized olefins and electron-deficient olefins or allylsilane by using a recyclable **ruthenium** catalyst at room temp. The cross-**metathesis** products are isolated in moderate to good yield. Ratios of E and Z cross-**metathesis** products depend

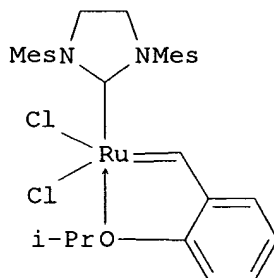
upon substituents on the electron-deficient coupling partner.

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN
TI Highly selective cross **metathesis** with **acrylonitrile**
using a phosphine free **Ru**-complex
AN 2001:186459 CAPLUS
DN 135:5692
TI Highly selective cross **metathesis** with **acrylonitrile**
using a phosphine free **Ru**-complex
AU Randl, Stefan; Gessler, Simon; Wakamatsu, Hideaki; Blechert, Siegfried
CS Institut fur Organische Chemie, Technische Universitat Berlin, Berlin,
10623, Germany
SO Synlett (2001), (3), 430-432
CODEN: SYNLES; ISSN: 0936-5214
PB Georg Thieme Verlag
DT Journal
LA English
OS CASREACT 135:5692
GI



I



II

AB The exchange of the PCy3 ligand in complex I by an o-isopropylphenyl ether ligand leads to the extremely stable and highly selective initiator II for cross **metathesis** reactions. For the 1st time, **Ru**-catalyzed cross coupling with **acrylonitrile** can be performed in good yields.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN
TI Development of hydrogenated ring-opening **metathesis** polymers
AN 2000:882375 CAPLUS
DN 134:178919
TI Development of hydrogenated ring-opening **metathesis** polymers
AU Otsuki, Toshihiro; Goto, Kohei; Komiya, Zen
CS Tsukuba Research Laboratories, JSR Corporation, Chiba, 299-0108, Japan
SO Journal of Polymer Science, Part A: Polymer Chemistry (2000), 38(Suppl.),
4661-4668
CODEN: JPACEC; ISSN: 0887-624X
PB John Wiley & Sons, Inc.
DT Journal
LA English
AB New hydrogenated ring-opening **metathesis** polymers with excellent thermal and optical properties were developed. These polymers were prepd.

by the ring-opening **metathesis** polymn. of ester-substituted tetracyclododecene monomers followed by the hydrogenation of the main-chain double bond. The degree of hydrogenation was an important factor for the thermal stability of the polymers, and as complete hydrogenation as possible was necessary to obtain a thermally stable polymer. The completely hydrogenated ring-opening polymer derived from 8-methyl-8-methoxycarbonyl-substituted monomer has a glass-transition temp. of 171.degree. and a 5% wt.-loss temp. of 446.degree.. This polymer has excellent thermal and optical properties because of its bulky and unsym. polycyclic structure in the main chain and is an alternative to glass or other transparent polymers such as poly(Me methacrylate) and polycarbonate resin. This polymer has also been used in a wide variety of applications, such as optical lenses, optical disks, optical films, and optical fiber.

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN
TI Hydrogenation of ring-opening **metathesis** polymer with
ruthenium catalysts
AN 1998:687657 CAPLUS
DN 130:4161
TI Hydrogenation of ring-opening **metathesis** polymer with
ruthenium catalysts
AU Yoshida, Yoshinori; Yoshinari, Masashi; Iio, Akira; Komiya, Zen
CS Tsukuba Research Laboratory, JSR Corporation, Tsukuba, 305-0841, Japan
SO Polymer Journal (Tokyo) (1998), 30(10), 819-823
CODEN: POLJB8; ISSN: 0032-3896
PB Society of Polymer Science, Japan
DT Journal
LA English
AB A ring-opening **metathesis** polymer (ROMP) of 8-methyl-8-methoxycarbonyltetracyclo[4.4.0.12,5.17,10]dodec-3-ene (I) was hydrogenated with homogeneous catalysts. Monohydrido or dihydrido **ruthenium**(II) complexes achieved high hydrogenation degree which gave thermally stable satd. ROMP of I. The kinetics of hydrogenation reactions in the presence of carbonylchlorohydridotris(triphenylphosphine) **ruthenium**, RuHCl(CO)(Ph₃)₃, were studied in detail and found to follow first-order kinetics to the concn. of double bonds. Apparent activation energy for the overall hydrogenation reaction detd. in the temp. range of 155-180.degree.C was smaller than that obsd. for the hydrogenation of **acrylonitrile**-butadiene copolymer by rhodium catalyst. The stirring rate did not affect hydrogenation reaction rate, although slower stirring lead to lower conversion at the very beginning of the reaction, indicating diffusion of hydrogen into the reaction media can be neglected if stirring is efficient. The concn. of RuHCl(CO)(Ph₃)₃ also affected the reaction rate. The reaction rate leveled off at around 3 .times. 10⁻² mM reaching more than 4300 of turnover no.. Applying 100 kg cm⁻² of hydrogen at 160.degree.C in m-xylene, high hydrogenation degrees were achieved at **ruthenium** concn. as low as 20 ppm to the polymer.

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> logoff holed

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NEWS 5 Jul 21 Identification of STN records implemented
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NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and
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NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
August 1, 2003
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in
September 2003
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in
September 2003
NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in
September 2003
NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in
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NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE
NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL
NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right
Truncation
NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR
NEWS 18 SEP 22 DIPPR file reloaded
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NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
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<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e methyl acrlate/cn

E1	1	METHYL ACONATE/CN
E2	1	METHYL ACRIDINE-2-CARBOXYLATE/CN
E3	0 -->	METHYL ACRLATE/CN
E4	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER/CN
E5	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER HOMOPOLYMER/CN
E6	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER-VINYLPYRROLIDONE COP OLYMER/CN
E7	1	METHYL ACRYLATE/CN
E8	1	METHYL ACRYLATE COMPOUND WITH METHYL LINOLATE (1:1)/CN
E9	1	METHYL ACRYLATE DIANION/CN
E10	1	METHYL ACRYLATE DIMER/CN
E11	1	METHYL ACRYLATE HOMOPOLYMER/CN
E12	1	METHYL ACRYLATE HOMOPOLYMER DOCOSYL ESTER/CN

=> e methyl acrylate/cn

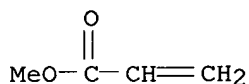
E1	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER HOMOPOLYMER/CN
E2	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER-VINYLPYRROLIDONE COP OLYMER/CN
E3	1 -->	METHYL ACRYLATE/CN
E4	1	METHYL ACRYLATE COMPOUND WITH METHYL LINOLATE (1:1)/CN
E5	1	METHYL ACRYLATE DIANION/CN
E6	1	METHYL ACRYLATE DIMER/CN
E7	1	METHYL ACRYLATE HOMOPOLYMER/CN
E8	1	METHYL ACRYLATE HOMOPOLYMER DOCOSYL ESTER/CN
E9	1	METHYL ACRYLATE HOMOPOLYMER DODECYL ESTER/CN
E10	1	METHYL ACRYLATE HOMOPOLYMER EICOSYL ESTER/CN
E11	1	METHYL ACRYLATE HOMOPOLYMER ESTER WITH 1-(2-HYDROXYETHYL) PY RROLIDINE/CN
E12	1	METHYL ACRYLATE HOMOPOLYMER ESTER WITH 2-(2-HYDROXYETHYL) PYR RIDINE/CN

=> e3

L1 1 "METHYL ACRYLATE"/CN

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 96-33-3 REGISTRY
 CN 2-Propenoic acid, methyl ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Acrylic acid methyl ester (6CI, 8CI)
 OTHER NAMES:
 CN 2-Propenoic acid methyl ester
 CN Methoxycarbonylethylene
 CN **Methyl acrylate**
 CN Methyl acrylic ester
 CN Methyl prop-2-enoate
 CN Methyl propenoate
 CN NSC 24146
 FS 3D CONCORD
 DR 102256-29-1
 MF C4 H6 O2
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*,
 EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*,
 HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC,
 PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA,
 ULIDAT, USPAT2, USPATFULL, VTB
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
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 11577 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 313 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

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FILE LAST UPDATED: 28 Sep 2003 (20030928/ED)

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=> l1/rct

11580 L1
2558019 RCT/RL
L2 7844 L1/RCT
(L1 (L) RCT/RL)

=> metathesis

11216 METATHESIS
159 METATHESES
L3 11264 METATHESIS
(METATHESIS OR METATHESES)

=> l2 and l3

L4 67 L2 AND L3

=> ruthenium and ru

74873 RUTHENIUM
20 RUTHENIUMS
74873 RUTHENIUM
(RUTHENIUM OR RUTHENIUMS)
57016 RU
185 RUS
57178 RU
(RU OR RUS)
L5 40237 RUTHENIUM AND RU

=> osmium or os

21403 OSMIUM
6 OSMIUMS
21405 OSMIUM
(OSMIUM OR OSMIUMS)
24377 OS
70 OSES
287 ORA
20 ORAS
13 OSAR
83 OSSA
24838 OS
(OS OR OSES OR ORA OR ORAS OR OSAR OR OSSA)
L6 35740 OSMIUM OR OS

=> l4 or l5

L7 40296 L4 OR L5

=> l4 and l7

L8 67 L4 AND L7

=> save temp l8 acrylmetath/a

ANSWER SET L8 HAS BEEN SAVED AS 'ACRYLMETATH/A'

=> d 18 57-67 ti

- L8 ANSWER 57 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Manganese Fischer carbene chemistry: reactions of $\text{Cp}'(\text{CO})_2\text{Mn}:\text{C}(\text{OMe}/\text{OLi})\text{R}$ with enynes, 1-hexyne, and acrylates
- L8 ANSWER 58 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Enantioselective catalysis. VII. Complexes from $[\text{P}(\text{R},\text{S}),3\text{R},4\text{R},\text{P}'(\text{R},\text{S})]-3,4$ -bis(phenylphosphino)pyrrolidine. Preparation of optically pure 1,2-bisphosphine ligands with four stereo centers containing additional functional groups
- L8 ANSWER 59 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Syntheses, reactions, and molecular structures of trans-hydrido(phenylamido)bis(triethylphosphine)platinum(II) and trans-hydridophenoxobis(triethylphosphine)platinum(II)
- L8 ANSWER 60 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Moldable **metathesis**-prepd. crosslinked halogen-containing copolymers
- L8 ANSWER 61 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Impact-resistant polyamide compositions
- L8 ANSWER 62 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Impact-resistant polyamide compositions
- L8 ANSWER 63 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Carbon-13 kinetic isotopic effect of the polymerization of monomers with multiple bonds
- L8 ANSWER 64 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Delayed gelation in the polymerization of cycloolefins
- L8 ANSWER 65 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Copolymers of norbornene-type cycloolefins
- L8 ANSWER 66 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Metathesis** of functionalized olefins: homogeneous cross-**metathesis** of cycloolefin and ethylenic esters
- L8 ANSWER 67 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Metathesis** of low-molecular-weight unsaturated acid esters

=> d 18 66,67 ti fbib abs

- L8 ANSWER 66 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Metathesis** of functionalized olefins: homogeneous cross-**metathesis** of cycloolefin and ethylenic esters
AN 1981:155949 CAPLUS
DN 94:155949
TI **Metathesis** of functionalized olefins: homogeneous cross-**metathesis** of cycloolefin and ethylenic esters
AU Otton, J.; Colleuille, Y.; Varagnat, J.
CS Cent. Rech. Carrieres, Rhone-Poulenc, Saint Fons, 69190, Fr.
SO Journal of Molecular Catalysis (1980), 8(1-3), 313-24
CODEN: JMCADS; ISSN: 0304-5102
DT Journal
LA English
AB The factors (nature of the functional group, distance between the double bond and the functional group) governing the **metathesis** of

functionally substituted olefins were studied with the catalyst WCl_6/Me_4Sn . A new route to long-chain linear mono- and diesters was thus achieved through cross-**metathesis** between 2 easily available compds. (e.g., cyclooctene and Et 3-pentenoate). Arguments are presented concerning the initiation, propagation, and termination steps.

L8 ANSWER 67 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Metathesis** of low-molecular-weight unsaturated acid esters
AN 1978:61950 CAPLUS
DN 88:61950
TI **Metathesis** of low-molecular-weight unsaturated acid esters
AU Verkuijlen, E.; Dirks, R. J.; Boelhouwer, C.
CS Inst. Chem. Technol., Univ. Amsterdam, Amsterdam, Neth.
SO Recueil des Travaux Chimiques des Pays-Bas (1977), 96(11), 86-90
CODEN: RTCPA3; ISSN: 0034-186X
DT Journal
LA English
AB Unsatd. esters $RCH:CR_1(CH_2)_nCO_2Me$ (I; R, R_1 , n = octyl, H, 7; H, H, 0-2; Me, H, 1; Et, H, 0; Me, H or Me, 0; H, Me, 0) underwent both homometathesis and cometathesis with sym. alkenes in the presence of WCl_6-SnMe_4 catalysts when n .gtoreq.1. $CH_2:CM_1CO_2Me$ showed low reactivity toward homometathesis but considerable activity toward cometathesis with 3-hexene; this is attributed to a preference for head-to-tail alignment in homometathesis.

=> d 18 46-56 ti

L8 ANSWER 46 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI A direct, highly convergent route to .alpha.-methylene-.gamma.-lactones fused to medium and large rings

L8 ANSWER 47 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Carbynehydridoruthenium complexes as catalysts for the selective, ring-opening **metathesis** of cyclopentene with methyl acrylate

L8 ANSWER 48 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Arenediazonium tetrachlorocuprates(II). Modification of the Meerwein and Sandmeyer reactions

L8 ANSWER 49 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Synthesis and characterization of d2 imido complexes of molybdenum. Crystal structure of $[MoCl_2\{N(mes)\}(PhC.tplbond.CPh)(PMe_3)_2].cntdot.0.5PhC.tplbond.CPh$ (mes = 2,4,6-trimethylphenyl)

L8 ANSWER 50 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Divalent Palladium and Platinum Complexes Containing Rigid Bidentate Nitrogen Ligands and Electrochemistry of the Palladium Complexes

L8 ANSWER 51 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Difunctional telechelic linear non-crosslinked polyolefins

L8 ANSWER 52 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Preparation of linear monofunctional and telechelic difunctional polymers by olefin **metathesis** and ring-opening polymerization of cycloolefin

L8 ANSWER 53 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Olefin **metathesis** in preparation of linear monofunctional and telechelic difunctional polymers

L8 ANSWER 54 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Reaction of the Coordinatively Unsaturated Methylene Complex
 $\text{Ir:CH}_2[\text{N}(\text{SiMe}_2\text{CH}_2\text{PPh}_2)_2]$ with Olefins: Stereoselective Formation of Allyl
 Hydride Derivatives

L8 ANSWER 55 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of
 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

L8 ANSWER 56 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Reactions of coordinated ligands. XVIII. Template syntheses and
 periphery reactions of macrocyclic multiphosphine ligands with functional
 groups

=> d 18 55 ti fbib abs

L8 ANSWER 55 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of
 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

AN 1995:397673 CAPLUS

DN 122:187739

TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of
 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

AU Barluenga, Jose; Aznar, Fernando; Martin, Alfredo

CS Instituto Universitario de Quimica Organometalica Enrique Moles,
 Universidad de Oviedo, Oviedo, 33071, Spain

SO Organometallics (1995), 14(3), 1429-33

CODEN: ORGND7; ISSN: 0276-7333

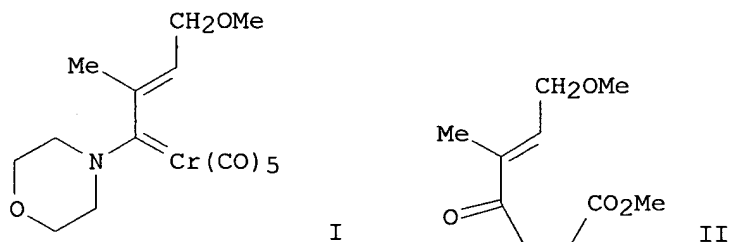
PB American Chemical Society

DT Journal

LA English

OS CASREACT 122:187739

GI



AB A new method for the synthesis of Cr, Mo, and W Fischer-type
 vinylaminocarbenes, e.g., I, by the **metathesis** reaction of
 2-amino-1,3-butadienes and phenyloxycarbenes is reported. The reaction of
 the vinylaminocarbenes with electron-deficient alkenes to afford, after
 hydrolysis, the vinyl ketones, e.g., II, was studied. To explain this
 behavior, a cyclopropanation process was proposed.

=> d 18 35-45 ti

L8 ANSWER 35 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis and **metathesis** reactions of a phosphine-free
 dihydroimidazole carbene **ruthenium** complex

L8 ANSWER 36 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI N-tri or di-alkylsilyl(perfluoroalkanesulfonyl)imide derivatives,
 preparation and use as Lewis acid catalysts

L8 ANSWER 37 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI In Situ Preparation of a Highly Active N-Heterocyclic Carbene-Coordinated
 Olefin **Metathesis** Catalyst

L8 ANSWER 38 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes:
 Potential Catalysts for Ring-Opening **Metathesis**

L8 ANSWER 39 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI A series of ruthenium(II) ester-carbene complexes as olefin
metathesis initiators: **metathesis** of acrylates

L8 ANSWER 40 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Synthesis of Functionalized Olefins by Cross and Ring-Closing
Metatheses

L8 ANSWER 41 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Ferrocene-based phosphonite-phosphine ligands, Pd and Rh complexes

L8 ANSWER 42 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Application of Olefin Cross-**Metathesis** to Organometallics.
 Synthesis of Unsaturated Ferrocenyl Alcohols and Ketones

L8 ANSWER 43 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes

L8 ANSWER 44 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Cationic ruthenium complexes, their production and their use

L8 ANSWER 45 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Cytotoxic Alkaloids Motuporamines A-C: Synthesis and Structural
 Verification

=> d 18 39,40 ti fbib abs

L8 ANSWER 39 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
 TI A series of ruthenium(II) ester-carbene complexes as olefin
metathesis initiators: **metathesis** of acrylates

AN 2000:443431 CAPLUS
 DN 133:207970
 TI A series of ruthenium(II) ester-carbene complexes as olefin
metathesis initiators: **metathesis** of acrylates

AU Ulman, M.; Belderrain, T. R.; Grubbs, R. H.
 CS Division of Chemistry and Chemical Engineering, The Arnold and Mabel
 Beckman Laboratory of Chemical Synthesis, California Institute of
 Technology, Pasadena, CA, 91125, USA
 SO Tetrahedron Letters (2000), 41(24), 4689-4693
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB A series of ester-carbene complexes, Cl₂(Cy₃P)₂Ru:CHZ (Z = CO₂R, R = Me,
 p-tolyl, t-Bu, iPr, cyclohexyl, 1-adamantyl, Ph), were synthesized. These
 complexes were highly active for the **metathesis** of olefinic
 substrates, including acrylates and trisubstituted olefins. In addn., the
 ester-carbene moiety is thermodynamically high in energy. As a result,
 these complexes react to ring-open cyclohexene by **metathesis** to

alleviate the thermodyn. strain of the ester-carbene ligand.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN
TI Synthesis of Functionalized Olefins by Cross and Ring-Closing
Metatheses
AN 2000:215112 CAPLUS
DN 133:4435
TI Synthesis of Functionalized Olefins by Cross and Ring-Closing
Metatheses
AU Chatterjee, Arnab K.; Morgan, John P.; Scholl, Matthias; Grubbs, Robert H.
CS Arnold and Mabel Beckman Laboratories of Chemical Synthesis Division of
Chemistry and Chemical Engineering, California Institute of Technology,
Pasadena, CA, 91125, USA
SO Journal of the American Chemical Society (2000), 122(15), 3783-3784
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
OS CASREACT 133:4435
AB Functionalized olefins are prepd. by cross-**metathesis** and
ring-closing **metathesis** of electron-deficient olefins employing
a ruthenium alkylidene catalyst. The ruthenium catalyst was demonstrated
to have high activity and functional group compatibility expanding the
range of olefins that can participate in olefin **metathesis**
reactions.

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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 NEWS 6 Jul 21 Polymer class term count added to REGISTRY
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 Right Truncation available
 NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
 August 1, 2003
 NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN
 NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in
 September 2003
 NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in
 September 2003
 NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in
 September 2003
 NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in
 September 2003
 NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE
 NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL
 NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Righ
 Truncation
 NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR
 NEWS 18 SEP 22 DIPPR file reloaded
 NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded
 NEWS 20 SEP 29 DISSABS now available on STN

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
 MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
 AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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FILE 'HOME' ENTERED AT 06:25:35 ON 30 SEP 2003

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'STNGUIDE' ENTERED AT 06:25:47 ON 30 SEP 2003

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LAST RELOADED: Sep 26, 2003 (20030926/UP).

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NAME	CREATED	NOTES/TITLE
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ACETALSRCH/L	TEMP	26 L-NUMBERS
ACRYLMETATH/A	TEMP	67 ANSWERS IN FILE CAPLUS
ADAMANSRCH/L	TEMP	10 L-NUMBERS
ADAMANTPREP/A	TEMP	51 ANSWERS IN FILE CAPLUS
ADAMANTSP/A	TEMP	64 ANSWERS IN FILE CAPLUS
ALKYLATIN/L	13 DEC 2001	9 L-NUMBERS
CHLOROALA/A	TEMP	14 ANSWERS IN FILE CAPLUS
CYCLIZATN/L	TEMP	10 L-NUMBERS
ESTERODOR/L	05 SEP 2002	42 L-NUMBERS
GENRCACETALS/A	TEMP	148 ANSWERS IN FILE CAPLUS
HALOSM/A	TEMP	1890 ANSWERS IN FILE CAPLUS
INDIUMCL3/A	30 MAY 2001	1 ANSWER IN FILE REGISTRY
LTWENTAUGFOR/A	04 AUG 2001	72 ANSWERS IN FILE CAPLUS
MESEALA/A	TEMP	241 ANSWERS IN FILE CAPLUS
METATHESIS/L	TEMP	36 L-NUMBERS
NEOTAMECRYST/A	24 APR 2001	59 ANSWERS IN FILE CAPLUS
NOSEARCH/L	TEMP	18 L-NUMBERS
NVLARMFULGEN/A	19 APR 2001	196 ANSWERS IN FILE REGISTRY
POHBENZALDEH/A	10 JUL 2001	5519 ANSWERS IN FILE CAPLUS
PROSTACMPD15/A	01 AUG 2001	34 ANSWERS IN FILE CAPLUS
SELENOCMPDS/L	TEMP	13 L-NUMBERS
STILLEAPP/L	07 JAN 2002	17 L-NUMBERS
TWOAMINOPOLY/Q	16 APR 2001	UPLOADED STRUCTURE

=> DIS SAVED/S
NO SAVED SDI REQUESTS

=> FIL CAPLUS	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.06	0.27

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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> ACT ACRYLMETATH/A
L1 (1)SEA FILE=REGISTRY ABB=ON PLU=ON "METHYL ACRYLATE"/CN
L2 (7844)SEA FILE=CAPLUS ABB=ON PLU=ON L1/RCT
L3 (11264)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS

L4 (67)SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND L3
 L5 (40237)SEA FILE=CAPLUS ABB=ON PLU=ON RUTHENIUM AND RU
 L6 (40296)SEA FILE=CAPLUS ABB=ON PLU=ON L4 OR L5
 L7 67 SEA FILE=CAPLUS ABB=ON PLU=ON L4 AND L6

=> FIL STNGUIDE

CQST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.42	0.69

FILE 'STNGUIDE' ENTERED AT 06:26:36 ON 30 SEP 2003
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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Sep 26, 2003 (20030926/UP).

=> ACT METATHESIS/L

L8 STR
 L9 (7)SEA FILE=REGISTRY SSS SAM L8
 L10 (0)SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN
 L11 (7)SEA FILE=REGISTRY SSS SAM L8
 L12 STR
 L13 (1)SEA FILE=REGISTRY SSS SAM L12
 L14 (2)SEA FILE=REGISTRY SSS FUL L12
 L15 STR
 L16 (14)SEA FILE=REGISTRY EXA FUL L15
 L17 (334)SEA FILE=CAPLUS ABB=ON PLU=ON L16
 L18 (157)SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS
 L19 (0)SEA FILE=CAPLUS ABB=ON PLU=ON METATHATHESIS
 L20 (11263)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS
 L21 (2)SEA FILE=CAPLUS ABB=ON PLU=ON L17 AND L20
 L22 (1)SEA FILE=REGISTRY ABB=ON PLU=ON 2-METHYL-2-BUTENE/CN
 L23 (1)SEA FILE=REGISTRY ABB=ON PLU=ON ISOBUTENE/CN
 L24 (1)SEA FILE=REGISTRY ABB=ON PLU=ON PROPENE/CN
 L25 (428)SEA FILE=CAPLUS ABB=ON PLU=ON L22/PREP
 L26 (13922)SEA FILE=CAPLUS ABB=ON PLU=ON L23
 L27 (37158)SEA FILE=CAPLUS ABB=ON PLU=ON L24
 L28 (3908)SEA FILE=CAPLUS ABB=ON PLU=ON L26 AND L27
 L29 (60)SEA FILE=CAPLUS ABB=ON PLU=ON L25 AND L28
 L30 (14436)SEA FILE=CAPLUS ABB=ON PLU=ON CARBENE
 L31 (0)SEA FILE=CAPLUS ABB=ON PLU=ON L29 AND L30
 L32 (11263)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS
 L33 (3)SEA FILE=CAPLUS ABB=ON PLU=ON L29 AND L32
 L34 (82949)SEA FILE=CAPLUS ABB=ON PLU=ON ACRYLONITRILE
 L35 (54)SEA FILE=CAPLUS ABB=ON PLU=ON L20 AND L34
 L36 (145)SEA FILE=CAPLUS ABB=ON PLU=ON CROWE
 L37 (0)SEA FILE=CAPLUS ABB=ON PLU=ON L35 AND L36
 L38 (9)SEA FILE=CAPLUS ABB=ON PLU=ON L30 AND L35
 L39 (91812)SEA FILE=CAPLUS ABB=ON PLU=ON RUTHENIUM OR RU
 L40 (35740)SEA FILE=CAPLUS ABB=ON PLU=ON OSMIUM OR OS
 L41 (116120)SEA FILE=CAPLUS ABB=ON PLU=ON L39 OR L40
 L42 (13)SEA FILE=CAPLUS ABB=ON PLU=ON L41 AND L35
 L43 (8)SEA FILE=CAPLUS ABB=ON PLU=ON L42 NOT L38

=> carbene

0 CARBENE
 L44 0 CARBENE

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
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FULL ESTIMATED COST

ENTRY
0.12

SESSION
0.81

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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> carbene

12316 CARBENE
7207 CARBENES
L45 14441 CARBENE
(CARBENE OR CARBENES)

=> 17 and 145

L46 16 L7 AND L45

=> d 146 1-16 ti

L46 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI A good bargain: An inexpensive, air-stable ruthenium **metathesis** catalyst derived from .alpha.-asarone

L46 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Preparation of novel transition-metal **carbene** complexes and their use as catalysts

L46 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Asymmetric Synthesis of Unusual Fused Tricyclic .beta.-Lactam Structures via Aza-Cycloadditions/Ring Closing **Metathesis**

L46 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Product subclass 40: allylsilanes

L46 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Preparation of ruthenium alkylidene complexes as catalysts for selective ring-opening cross-**metathesis** of cycloolefins with acrylates

L46 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

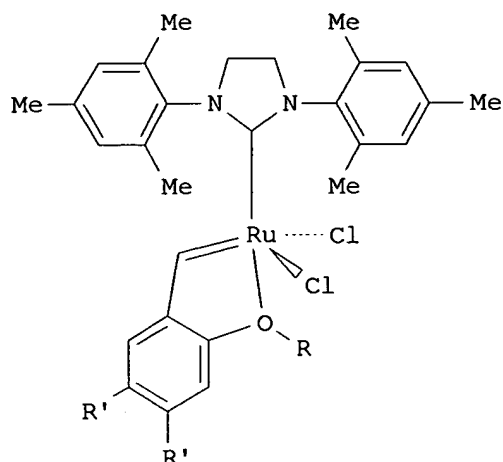
TI Synthesis of functionalized and unfunctionalized olefins via cross and ring-closing **metathesis**

L46 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI A tertiary phosphine that is too bulky: preparation of catalytically less

active **carbene** and vinylidene **ruthenium**(II) complexes

- L46 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Olefin **Metathesis** Involving Ruthenium Enoic **Carbene**
Complexes
- L46 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Synthesis and **metathesis** reactions of a phosphine-free
dihydroimidazole **carbene ruthenium** complex
- L46 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI In Situ Preparation of a Highly Active N-Heterocyclic **Carbene**
-Coordinated Olefin **Metathesis** Catalyst
- L46 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes:
Potential Catalysts for Ring-Opening **Metathesis**
- L46 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI A series of ruthenium(II) ester-**carbene** complexes as olefin
metathesis initiators: **metathesis** of acrylates
- L46 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes
- L46 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Cationic ruthenium complexes, their production and their use
- L46 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of
2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes
- L46 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Manganese Fischer **carbene** chemistry: reactions of
 $\text{Cp}'(\text{CO})_2\text{Mn}:\text{C}(\text{OMe}/\text{OLi})\text{R}$ with enynes, 1-hexyne, and acrylates
- => d l46 1-16 ti fbib abs
- L46 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI A good bargain: An inexpensive, air-stable ruthenium **metathesis**
catalyst derived from .alpha.-asarone
AN 2003:246866 CAPLUS
DN 139:85476
TI A good bargain: An inexpensive, air-stable ruthenium **metathesis**
catalyst derived from .alpha.-asarone
AU Grela, Karol; Kim, Mikhail
CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, 01224,
Pol.
SO European Journal of Organic Chemistry (2003), (6), 963-966
CODEN: EJOCHF; ISSN: 1434-193X
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
GI



AB One-step synthesis of ruthenium **carbene** precatalyst (I) (R = CH₃, R' = OCH₃) from inexpensive .alpha.-asarone is described. This recyclable and easy to obtain complex I was used successfully in various types of **metathesis** reactions (RCM, CM, enyne) as a cheaper and more potent substitute of the Hoveyda-type precatalyst I (R = i-Pr, R' = H).

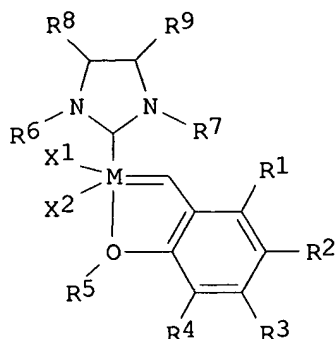
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Preparation of novel transition-metal **carbene** complexes and their use as catalysts
AN 2003:117835 CAPLUS
DN 138:170361
TI Preparation of novel transition-metal **carbene** complexes and their use as catalysts
IN Blechert, Siegfried; Wakamatsu, Hideaki
PA Bayer Aktiengesellschaft, Germany
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003011875	A1	20030213	WO 2002-EP8009	20020718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

DE 10137051 A1 20030220 DE 2001-10137051A 20010731
DE 2001-10137051 20010731

OS CASREACT 138:170361; MARPAT 138:170361
GI



I

AB The invention relates to the prepn. of novel transition-metal complexes I (M = Group 8 transition metal, X1; X2 = anionic ligands; R1-R4 = H, C1-50 alkyl, cycloalkyl, cyano, halo, alkoxy, etc.; R5 = H, C1-50 cyclic or straight chain alkyl or aryl; R6, R7 = C1-30 cyclic or straight chain alkyl; R8, R9 = H, R8R9 = bond), intermediates in the prodn. thereof and the use as catalysts in org. reactions, in particular in **metathesis** reactions. Thus, CuCl mediated reaction of 2-isopropoxy-3-vinylbiphenyl (prepn. given) with tricyclohexylphosphine[1,3-bis(2,4,6-trimethylphenyl)-4,5-dihydroimidazol-2-ylidene][benzylidene]**ruthenium**(IV) dichloride in CH₂Cl₂ gave title catalyst I (M = **Ru**, X1, X2 = Cl, R1-R3 = H, R4 = Ph, R5 = iPr, R6, R7 = mesityl, R8, R9 = H) which catalyzed cyclization of TsN(CH₂CH:CH₂)₂ to give N-tosyl-2,5-dihdropyrrole.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Asymmetric Synthesis of Unusual Fused Tricyclic .beta.-Lactam Structures via Aza-Cycloadditions/Ring Closing **Metathesis**

AN 2003:45406 CAPLUS

DN 138:254985

TI Asymmetric Synthesis of Unusual Fused Tricyclic .beta.-Lactam Structures via Aza-Cycloadditions/Ring Closing **Metathesis**

AU Alcaide, Benito; Almendros, Pedro; Alonso, Jose M.; Redondo, Maria C.
CS Departamento de Quimica Organica I, Facultad de Quimica, Universidad Complutense, Madrid, 28040, Spain

SO Journal of Organic Chemistry (2003), 68(4), 1426-1432
CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

OS CASREACT 138:254985

AB Conveniently substituted bis-.beta.-lactams, pyrrolidinyl-.beta.-lactams, and piperidinyl-.beta.-lactams undergo ring-closing **metathesis** using Grubbs' **carbene**, Cl₂(Cy₃P)2Ru:CHPh, to give medium-sized rings fused to bis-2-azetidinone, pyrrolidinyl-2-azetidinone, or piperidinyl-2-azetidinone systems. The diolefinic cyclization precursors can be obtained from optically pure 4-oxoazetidine-2-carbaldehydes bearing an extra alkene tether at position 1 or 3 of the .beta.-lactam ring via [2 + 2] cycloaddn. of imino 2-azetidinones, N-metalated azomethine ylide [3 + 2] cycloaddn., and subsequent N-acylation of the pyrrolidinyl nitrogen atom, or through aza-Diels-Alder cycloaddn. of 2-azetidinone-tethered imines. Under std. reaction conditions, the combination of cycloaddn.

reactions of 2-azetidinone-tethered imines with ring-closing
metathesis offers an asym. entry to a variety of unusual fused
tricyclic 2-azetidinones bearing two bridgehead nitrogen atoms.

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Product subclass 40: allylsilanes
AN 2002:863863 CAPLUS
DN 139:53057
TI Product subclass 40: allylsilanes
AU Sarkar, T. K.
CS Dept. of Chemistry, Indian Institute of Technology, Kharagpur, 721302,
India
SO Science of Synthesis (2002), 4, 837-925
CODEN: SSCYJ9
PB Georg Thieme Verlag
DT Journal; General Review
LA English
AB A review of synthesis and reactions of allylsilanes. Covered reactions
include couplings, condensations, eliminations, condensations,
cycloaddns., redns., and cyclizations.

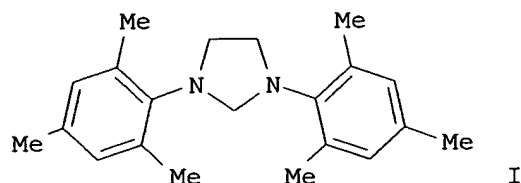
RE.CNT 325 THERE ARE 325 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Preparation of ruthenium alkylidene complexes as catalysts for selective
ring-opening cross-**metathesis** of cycloolefins with acrylates
AN 2002:777865 CAPLUS
DN 137:279309
TI Preparation of ruthenium alkylidene complexes as catalysts for selective
ring-opening cross-**metathesis** of cycloolefins with acrylates
IN Morgan, John P.; Morrill, Christie; Grubbs, Robert H.; Choi, Tae-Lim
PA California Institute of Technology, USA
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002079127	A1	20021010	WO 2002-US10395	20020401
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,				
TJ, TM				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,				
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,				
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
			US 2001-280601PP	20010330
US 2002198426	A1	20021226	US 2002-114674	20020401
			US 2001-280601PP	20010330

OS MARPAT 137:279309
GI



AB A catalytic method is provided for a ring-opening cross-**metathesis** reaction between a cycloolefinic substrate and a second olefinic reactant, wherein the catalyst used is a transition metal alkylidene complex substituted with an N-heterocyclic **carbene** ligand. The substrates are selected so that the rate of the cross-**metathesis** reaction of the second olefinic reactant, kCM, is greater than or equal to the rate of the ring-opening **metathesis** reaction, kRo. In this way, the predominant ROCM product is a monomer, dimer, and/or oligomer, but not a polymer. The invention addnl. provides for selective prodn. of an end-differentiated olefinic product, using trisubstituted cycloolefins as substrates and/or a subsequent cross-**metathesis** reaction following an initial ROCM step. The cycloolefinic substrates include low-strain olefins such as cyclohexene as well as higher strain olefins such as cyclooctene. The predominant teaching involves the ring-opening cross-**metathesis** of cycloolefins with acryl species in the presence of ruthenium alkylidene complex catalysts. In a typical example, 1,5-COD undergoes ROCM with Me acrylate in the presence of RuCl₂(:CHPh)(IMesH₂)(PCy₃) (synthetic prepn. given) [IMesH₂ = (I)] to give 78% of the corresponding ring-opened **metathesis** dimer.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis of functionalized and unfunctionalized olefins via cross and ring-closing **metathesis**

AN 2002:10410 CAPLUS

DN 136:70246

TI Synthesis of functionalized and unfunctionalized olefins via cross and ring-closing **metathesis**

IN Grubbs, Robert H.; Chatterjee, Arnab K.; Morgan, John P.; Scholl, Matthias; Choi, Tae-lim

PA California Institute of Technology, USA

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002000590	A1	20020103	WO 2001-US20180	20010625
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
				US 2000-213757PP	20000623
	US 2002137978	A1	20020926	US 2001-891144	20010625
				US 2000-213757PP	20000623

EP 1301458

A1 20030416

EP 2001-950437 20010625

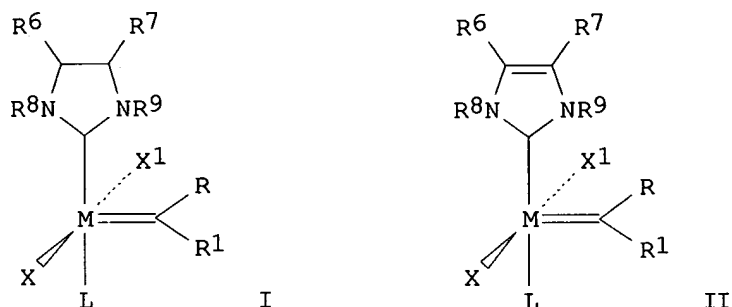
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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2000-213757PP 20000623

WO 2001-US20180W 20010625

OS MARPAT 136:70246

GI



AB The cross-**metathesis** and ring-closing **metathesis** reactions between geminal disubstituted olefins and terminal olefins, use a **Ru** or **Os** metal **carbene** complex **metathesis** catalyst. Specifically, .alpha.-functionalized or unfunctionalized olefins are made via intermol. cross-**metathesis** and intramol. ring-closing **metathesis** using a **Ru** alkylidene complex. The catalysts have structures (I) or (II) (M = **Ru** or **Os**; X, X1 = anionic ligand; L = neutral electron donor ligand; and, R, R1, R6, R7, R8, and R9 = H or a substituent selected from C1-C20 alkyl, C2-C20 alkenyl, C2-C20 alkynyl, aryl, C1-C20 carboxylate, C1-C20 alkoxy, C2-C20 alkenyloxy, C2-C20 alkynyloxy, aryloxy, C2-C20 alkoxy carbonyl, C1-C20 alkylthio, C1-C20 alkylsulfonyl and C1-C20 alkylsulfinyl).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI A tertiary phosphine that is too bulky: preparation of catalytically less active **carbene** and vinylidene **ruthenium**(II) complexes

AN 2001:925827 CAPLUS

DN 136:294927

TI A tertiary phosphine that is too bulky: preparation of catalytically less active **carbene** and vinylidene **ruthenium**(II) complexes

AU Stuer, Wolfram; Wolf, Justin; Werner, Helmut

CS Institut fur Anorganische Chemie, Universitat Wurzburg, Wurzburg, D-97074, Germany

SO Journal of Organometallic Chemistry (2002), 641(1-2), 203-207
CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier Science S.A.

DT Journal

LA English

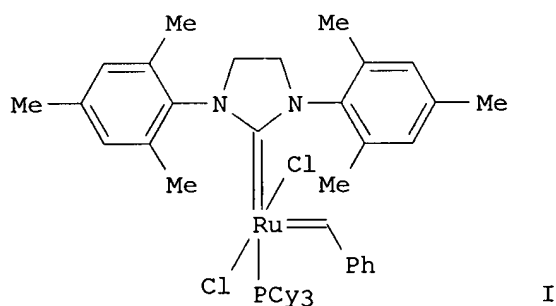
OS CASREACT 136:294927

AB Tricyclooctylphosphine PCoc3 (1), which was prepd. from PCl3 and cyclooctyl Grignard reagent, reacts under an atm. of H2 with the dimer [RuCl2(.eta.3:.eta.3-ClOH16)]2 (2) to give the hydrido(dihydrogen) complex [RuHCl(H2)(PCoc3)2] (4); in contrast, treatment of 2 with PPh3 under the same conditions affords [RuHCl(PPh3)3] (3). The reaction of 4 with

acetylene in the presence of MgCl_2 and H_2O gives the **Ru carbene** $[\text{RuCl}_2(\text{:CHCH}_3)(\text{PCoc}_3)_2]$ (5) in 70% isolated yield. In the absence of MgCl_2 and H_2O , 4 reacts with acetylene at low temp. to give the hydrido(vinylidene) complex $[\text{RuHCl}(\text{:C:CH}_2)(\text{PCoc}_3)_2]$ (6) almost quant. Compds. 5, 6 and $[\text{RuH}(\text{:C:CH}_2)(\text{PCoc}_3)_2]$ (7), the latter being obtained from 6 and $\text{CF}_3\text{CO}_2\text{K}$ by ligand exchange, are poor catalysts for ROMP and cross olefin **metathesis**.

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Olefin **Metathesis** Involving Ruthenium Enoic **Carbene** Complexes
AN 2001:699173 CAPLUS
DN 136:19856
TI Olefin **Metathesis** Involving Ruthenium Enoic **Carbene** Complexes
AU Choi, Tae-Lim; Lee, Choon Woo; Chatterjee, Arnab K.; Grubbs, Robert H.
CS Arnold and Mabel Beckman Laboratories of Chemical Synthesis Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA, 91125, USA
SO Journal of the American Chemical Society (2001), 123(42), 10417-10418
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
OS CASREACT 136:19856
GI



AB Unsatd. diesters and diketones were prepd. stereoselectively in 41-99% yields by olefin **metathesis** of acrylate esters and .alpha.,.beta.-unsatd. ketones in the presence of ruthenium **carbene** catalyst I (Cy = cyclohexyl). Ruthenium **carbene** complexes contg. carbonylmethylene groups are formed in situ as the active **metathesis** catalysts. Acrylates undergo **metathesis** in the presence of I at concns. of 0.40M, while unsatd. ketones undergo **metathesis** at concn. of 0.05M; acrylate-derived ruthenium **carbene** complexes were not as stable and required higher concns. of alkene to form catalytic effective concns. of alkoxy carbonylmethylene ruthenium complexes, while the **carbene** complexes derived from unsatd. ketones were more stable and required lower concns. of reactants to generate catalytically active concns. of ruthenium enoic **carbene** catalysts. Both acrylates and .alpha.,.beta.-unsatd. ketones underwent ring-opening cross-**metathesis** reactions with

cyclohexene and cross-**metathesis** reactions with 2-methyl-1-hexene and methylenecyclohexane to give unsym. substituted products. The use of the imidazolidinylideneruthenium catalyst stabilizes electron-withdrawing ruthenium **carbene** moieties and allows **metathesis** reactions with acrylates and .alpha.,.beta.-unsatd. ketones to proceed in high yields.

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene ruthenium** complex
AN 2000:872572 CAPLUS
DN 134:207942
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene ruthenium** complex
AU Gessler, Simon; Randl, Stefan; Blechert, Siegfried
CS Institut fur Organische Chemie, Technische Universitat Berlin, Berlin, D-10623, Germany
SO Tetrahedron Letters (2000), 41(51), 9973-9976
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
AB Synthesis and activity in ring closure **metathesis** (RCM) and cross **metathesis** (CM) of the phosphine-free 1,3-dimesityl-2-imidazolidinylidene (IHMe) Ru alkoxybenzylidene complex ([RuCl₂(IHMe)(2-iPrOC₆H₄CH)])) are reported. The activities of the above complex and [RuCl₂(PCy₃)(CHPh)(IHMe)] were compared.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI In Situ Preparation of a Highly Active N-Heterocyclic **Carbene**-Coordinated Olefin **Metathesis** Catalyst
AN 2000:621214 CAPLUS
DN 133:349821
TI In Situ Preparation of a Highly Active N-Heterocyclic **Carbene**-Coordinated Olefin **Metathesis** Catalyst
AU Morgan, John P.; Grubbs, Robert H.
CS Arnold and Mabel Beckman Laboratories for Chemical Synthesis, California Institute of Technology, Pasadena, CA, 91125, USA
SO Organic Letters (2000), 2(20), 3153-3155
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society
DT Journal
LA English
OS CASREACT 133:349821
AB Highly active N-heterocyclic **carbene**-coordinated catalysts may be synthesized and used in situ, without requiring prior isolation of the catalyst. Activation of this in situ catalyst with ethereal HCl dramatically reduces the reaction times required for high conversions. A variety of .alpha.,.beta.-unsatd. carbonyl-contg. substrates participate readily in cross and ring-closing **metathesis** reactions using this prepn.

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes: Potential Catalysts for Ring-Opening **Metathesis**
AN 2000:607751 CAPLUS

DN 133:335320
 TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes:
 Potential Catalysts for Ring-Opening **Metathesis**
 AU Saoud, Mustapha; Romerosa, Antonio; Peruzzini, Maurizio
 CS Area de Quimica Inorganica, Universidad de Almeria, Almeria, 04071, Spain
 SO Organometallics (2000), 19(20), 4005-4007
 CODEN: ORGND7; ISSN: 0276-7333
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 133:335320
 AB Reaction of the water-sol. **Ru** complex
 $[(RuCl_2(TPPMS)_2)Na_2]_2 \cdot 4H_2O$ with phenylacetylene and
 diphenylpropargyl alc. in THF at room temp. gave the water-sol. unsatd.
carbenes $[(RuCl_2(C:CHPh)(TPPMS)_2)]Na_2$ and $[(RuCl(\mu-C$
 $Cl)(C:C(CPh)_2)(TPPMS)_2]Na_4$, resp. The ability of these complexes, which
 represent the 1st examples of water-sol. vinylidenes and allenylidenes, to
 catalyze the ring-opening **metathesis** of cyclic olefins with Me
 acrylate as chain transfer reagents is briefly discussed.
 RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
 TI A series of ruthenium(II) ester-**carbene** complexes as olefin
metathesis initiators: **metathesis** of acrylates
 AN 2000:443431 CAPLUS
 DN 133:207970
 TI A series of ruthenium(II) ester-**carbene** complexes as olefin
metathesis initiators: **metathesis** of acrylates
 AU Ulman, M.; Belderrain, T. R.; Grubbs, R. H.
 CS Division of Chemistry and Chemical Engineering, The Arnold and Mabel
 Beckman Laboratory of Chemical Synthesis, California Institute of
 Technology, Pasadena, CA, 91125, USA
 SO Tetrahedron Letters (2000), 41(24), 4689-4693
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB A series of ester-**carbene** complexes, $Cl_2(Cy_3P)_2Ru:CHZ$ ($Z = CO_2R$,
 $R = Me, p\text{-tolyl}, t\text{-Bu}, iPr, cyclohexyl, 1\text{-adamantyl}, Ph$), were
 synthesized. These complexes were highly active for the
metathesis of olefinic substrates; including acrylates and
 trisubstituted olefins. In addn., the ester-**carbene** moiety is
 thermodynamically high in energy. As a result, these complexes react to
 ring-open cyclohexene by **metathesis** to alleviate the thermodyn.
 strain of the ester-**carbene** ligand.
 RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes
 AN 1999:757384 CAPLUS
 DN 132:93445
 TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes
 AU Campora, Juan; Hudson, Sarah A.; Massiot, Philippe; Maya, Celia M.; Palma,
 Pilar; Carmona, Ernesto; Martinez-Cruz, Luis A.; Vegas, Angel
 CS Departamento de Quimica Inorganica-Instituto de Investigaciones Quimicas,
 Universidad de Sevilla-Consejo Superior de Investigaciones Cientificas,
 Seville, 41092, Spain
 SO Organometallics (1999), 18(25), 5225-5237
 CODEN: ORGND7; ISSN: 0276-7333
 PB American Chemical Society

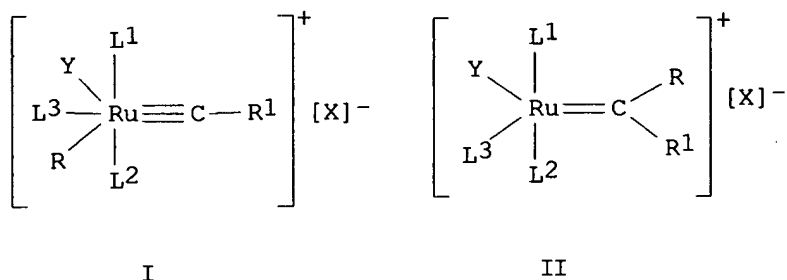
DT Journal
 LA English
 OS CASREACT 132:93445
 AB The reaction of benzylpalladium complexes trans-[Pd(CH₂C₆H₄Z)(X)(PR₃)₂]
 (2) with isocyanides yields imidoyl complexes that exist in soln. as
 equil. mixts. of the corresponding imine ([Pd(C(:NR')CH₂C₆H₄Z)(X)(PR₃)₂],
 3-im) and enamine ([Pd(C(NHR'):CHC₆H₄Z)(X)(PR₃)₂], 3-en) tautomers. While
 the equil. const. is markedly affected by the electronic effect exerted by
 the substituents at the Ph ring (Z), the effect of the metal fragment is
 less pronounced and is dominated by steric factors. Both tautomeric forms
 can also be found in the solid state, and the x-ray structures of
 complexes of type 2, 3-im, and 3-en were detd.

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Cationic ruthenium complexes, their production and their use
 AN 1999:736714 CAPLUS
 DN 131:337174
 TI Cationic ruthenium complexes, their production and their use
 IN Schwab, Peter; Schulz, Michael; Wolf, Justin; Stuer, Wolfram; Werner,
 Helmut
 PA BASF Aktiengesellschaft, Germany
 SO PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9958538	A1	19991118	WO 1999-EP2992	19990503
	W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HU, ID, IL, IN, JP, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	DE 19820652	A1	19991111	DE 1998-19820652A	19980508
	AU 9939301	A1	19991129	DE 1998-19820652	19980508
				AU 1999-39301	19990503
				DE 1998-19820652A	19980508
	EP 1075482	A1	20010214	WO 1999-EP2992 W	19990503
	EP 1075482	B1	20020403	EP 1999-922156	19990503
	R: BE, CH, DE, FR, GB, IT, LI, NL				
				DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503
	JP 2002514651	T2	20020521	JP 2000-548342	19990503
				DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503
	US 6500975	B1	20021231	US 2000-674536	20001102
				DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503

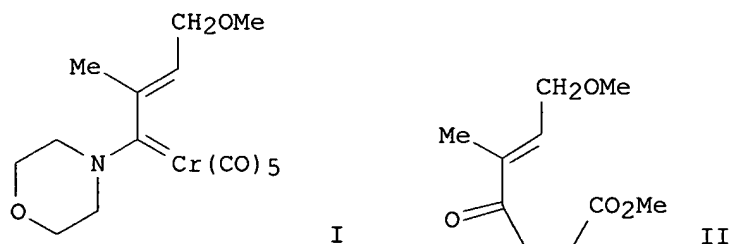
OS MARPAT 131:337174
 GI



AB The invention relates to cationic ruthenium complexes I and II or mixts. contg. same, where II can be stabilized by a further ligand L4 and X is an anion which is not or weakly coordinated to the metal center; Y is a monodentate or multidentate anionic ligand; R and R' each independently of each other are hydrogen or a possibly substituted C1-20 alkyl-, C6-20-aryl-, or C7-20 alkylaryl rest; and L1, L2, L3 and L4 independently of each other are neutral electron donor ligands. Thus, reaction of $[\text{RuCl}_2(\text{C}_8\text{H}_{12})]_n$ with tricyclohexylphosphine in 2-butanol in the presence of hydrogen gave 75% $\text{RuHCl}(\text{H}_2)(\text{PCy}_3)_2$ which on treatment with acetylene gave $\text{RuHCl}(:\text{C}:\text{CH}_2)(\text{PCy}_3)_2$. Treatment of $\text{RuHCl}(:\text{C}:\text{CH}_2)(\text{PCy}_3)_2$ with $[\text{PhNMe}_2\text{H}][\text{B}(\text{C}_6\text{F}_5)_4]$ in CH_2Cl_2 gave catalyst $[\text{RuClH}(\text{tpfbond.CMe})(\text{NMe}_2\text{Ph})(\text{PCy}_3)_2][\text{B}(\text{C}_6\text{F}_5)_4]$ (I). The catalytic activity of I for ring opening **metathesis** polymn. of cyclooctene and ring opening **metathesis** of cyclopentene with Me acrylate is described.

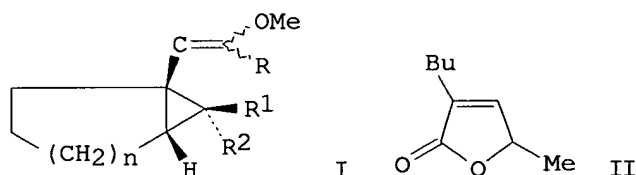
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes
AN 1995:397673 CAPLUS
DN 122:187739
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes
AU Barluenga, Jose; Aznar, Fernando; Martin, Alfredo
CS Instituto Universitario de Quimica Organometalica Enrique Moles, Universidad de Oviedo, Oviedo, 33071, Spain
SO Organometallics (1995), 14(3), 1429-33
CODEN: ORGND7; ISSN: 0276-7333
PB American Chemical Society
DT Journal
LA English
OS CASREACT 122:187739
GI



AB A new method for the synthesis of Cr, Mo, and W Fischer-type vinylaminocarbenes, e.g., I, by the **metathesis** reaction of 2-amino-1,3-butadienes and phenyloxycarbenes is reported. The reaction of the vinylaminocarbenes with electron-deficient alkenes to afford, after hydrolysis, the vinyl ketones, e.g., II, was studied. To explain this behavior, a cyclopropanation process was proposed.

L46 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Manganese Fischer **carbene** chemistry: reactions of $\text{Cp}'(\text{CO})_2\text{Mn}:\text{C}(\text{OMe}/\text{OLi})\text{R}$ with enynes, 1-hexyne, and acrylates
 AN 1991:23434 CAPLUS
 DN 114:23434
 TI Manganese Fischer **carbene** chemistry: reactions of $\text{Cp}'(\text{CO})_2\text{Mn}:\text{C}(\text{OMe}/\text{OLi})\text{R}$ with enynes, 1-hexyne, and acrylates
 AU Hoyer, Thomas R.; Rehberg, Gretchen M.
 CS Dep. Chem., Univ. Minnesota, Minneapolis, MN, 55455, USA
 SO Organometallics (1990), 9(12), 3014-15
 CODEN: ORGND7; ISSN: 0276-7333
 DT Journal
 LA English
 OS CASREACT 114:23434
 GI



AB $\text{Cp}'(\text{CO})_2\text{Mn}:\text{C}(\text{OMe})\text{R}$ ($\text{Cp}' = \text{C}_5\text{H}_4\text{Me}$; $\text{R} = \text{Me}, \text{Ph}$) were treated with $\text{HC.tplbond.CCH}_2\text{C}(\text{CO}_2\text{Me})_2(\text{CH}_2)_n\text{CH}:\text{CR}_1\text{R}_2$ ($\text{R}_1, \text{R}_2 = \text{H}, \text{Me}$; $n = 1, 2$) to give bicyclic vinylcyclopropanes I as a mixt. of E- and Z-enol ethers which hydrolyzed upon standing in air to the cyclopropyl ketones. There was no evidence for cyclobutanone, furan or **metathesis** products from these reactions which shows that CO insertion into vinylogous **carbene** intermediates to generate ketene complexes is disfavored relative to internal cyclopropanation. Reaction of $\text{Cp}'(\text{CO})_3\text{Mn}$ with MeLi to generate $\text{Cp}'(\text{CO})_2\text{Mn}:\text{C}(\text{OLi})\text{Me}$ and reaction with BuC.tplbond.CH generated butenolide II in a manner analogous to that obsd. for the acyl(pentacarbonyl)chromate species. The in situ reaction of $\text{Cp}'(\text{CO})_2\text{Mn}:\text{C}(\text{OLi})\text{Me}$ with $\text{R}_3\text{CH}:\text{CR}_4\text{CO}_2\text{Me}$ ($\text{R}_3, \text{R}_4 = \text{H}, \text{Me}$) gave $\text{AcCHR}_3\text{CHR}_4\text{CO}_2\text{Me}$ which are formally the products of the addn of an acetyl anion in a Michael fashion to the enoates.

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CA SUBSCRIBER PRICE	-10.42	-10.42

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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DICTIONARY FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> me methyl acrylate/cn
L47 0 ME METHYL ACRYLATE/CN

=> e methyl acrylate/cn
E1 1 METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER HOMOPOLYMER/CN
E2 1 METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER-VINYLPYRROLIDONE COP

OLYMER/CN

E3	1	--> METHYL ACRYLATE/CN
E4	1	METHYL ACRYLATE COMPOUND WITH METHYL LINOLATE (1:1)/CN
E5	1	METHYL ACRYLATE DIANION/CN
E6	1	METHYL ACRYLATE DIMER/CN
E7	1	METHYL ACRYLATE HOMOPOLYMER/CN
E8	1	METHYL ACRYLATE HOMOPOLYMER DOCOSYL ESTER/CN
E9	1	METHYL ACRYLATE HOMOPOLYMER DODECYL ESTER/CN
E10	1	METHYL ACRYLATE HOMOPOLYMER EICOSYL ESTER/CN
E11	1	METHYL ACRYLATE HOMOPOLYMER ESTER WITH 1-(2-HYDROXYETHYL) PYRROLIDINE/CN
E12	1	METHYL ACRYLATE HOMOPOLYMER ESTER WITH 2-(2-HYDROXYETHYL) PYRROLIDINE/CN

=> e3

L48 1 "METHYL ACRYLATE"/CN

=> d 148

L48 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 96-33-3 REGISTRY

CN 2-Propenoic acid, methyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Acrylic acid methyl ester (6CI, 8CI)

OTHER NAMES:

CN 2-Propenoic acid methyl ester

CN Methoxycarbonylethylene

CN **Methyl acrylate**

CN Methyl acrylic ester

CN Methyl prop-2-enoate

CN Methyl propenoate

CN NSC 24146

FS 3D CONCORD

DR 102256-29-1

MF C4 H6 O2

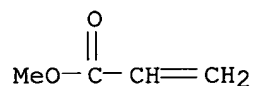
CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHM, CSNB, DETHERM*, DIPPR*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



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11557 REFERENCES IN FILE CA (1907 TO DATE)

835 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

11577 REFERENCES IN FILE CAPLUS (1907 TO DATE)

313 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> e 1-hexene/cn

E1	1	1-HEXEN-6-YL ACRYLATE/CN
E2	1	1-HEXEN-6-YL METHACRYLATE/CN
E3	1 -->	1-HEXENE/CN
E4	1	1-HEXENE CARBONATE/CN
E5	1	1-HEXENE COMPOUND WITH IODINE (1:1)/CN
E6	1	1-HEXENE COMPOUND WITH IODINE CHLORIDE (ICL) (1:1)/CN
E7	1	1-HEXENE DIMER/CN
E8	1	1-HEXENE EPOXIDE/CN
E9	1	1-HEXENE OXIDE/CN
E10	1	1-HEXENE OXIDE-D-LACTIDE-L-LACTIDE-PROPYLENE GLYCOL-PYROMELL ITIC DIANHYDRIDE COPOLYMER/CN
E11	1	1-HEXENE OXIDE-METHYL 4,5-EPOXYPENTANOATE COPOLYMER/CN
E12	1	1-HEXENE OXIDE-METHYL 7,8-EPOXYOCTANOATE COPOLYMER/CN

=> e3

L49 1 1-HEXENE/CN

=> d 149

L49 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 592-41-6 REGISTRY

CN **1-Hexene (8CI, 9CI)** (CA INDEX NAME)

OTHER NAMES:

CN 1-n-Hexene

CN Dialen 6

CN Hexene

CN NSC 74121

FS 3D CONCORD

DR 153522-12-4, 33004-04-5

MF C6 H12

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHM, CSNB, DETHERM*, DIPPR*,
EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*,
HSDB*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*,
PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2,
USPATFULL, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

H₂C=CH-Bu-n

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9492 REFERENCES IN FILE CA (1907 TO DATE)

147 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

9500 REFERENCES IN FILE CAPLUS (1907 TO DATE)

6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY	SESSION
16.82	66.62

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-10.42

CA SUBSCRIBER PRICE

FILE 'CAPLUS' ENTERED AT 07:22:01 ON 30 SEP 2003
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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 148

L50 11583 L48

=> 149

L51 9503 L49

=> 150 and 151

L52 228 L50 AND L51

=> d his

(FILE 'HOME' ENTERED AT 06:25:35 ON 30 SEP 2003)

FILE 'STNGUIDE' ENTERED AT 06:25:47 ON 30 SEP 2003

FILE 'CAPLUS' ENTERED AT 06:26:34 ON 30 SEP 2003

ACT ACRYLMETATH/A

L1 (1)SEA FILE=REGISTRY ABB=ON PLU=ON "METHYL ACRYLATE"/CN
L2 (7844)SEA FILE=CAPLUS ABB=ON PLU=ON L1/RCT
L3 (11264)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS
L4 (67)SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND L3
L5 (40237)SEA FILE=CAPLUS ABB=ON PLU=ON RUTHENIUM AND RU
L6 (40296)SEA FILE=CAPLUS ABB=ON PLU=ON L4 OR L5
L7 67 SEA FILE=CAPLUS ABB=ON PLU=ON L4 AND L6

FILE 'STNGUIDE' ENTERED AT 06:26:36 ON 30 SEP 2003

ACT METATHESIS/L

L8 STR

L9 (7)SEA FILE=REGISTRY SSS SAM L8

```

L10 (      0)SEA FILE=REGISTRY ABB=ON  PLU=ON  DSCAN
L11 (      7)SEA FILE=REGISTRY SSS SAM L8
L12      STR
L13 (      1)SEA FILE=REGISTRY SSS SAM L12
L14 (      2)SEA FILE=REGISTRY SSS FUL L12
L15      STR
L16 (     14)SEA FILE=REGISTRY EXA FUL L15
L17 (    334)SEA FILE=CAPLUS ABB=ON  PLU=ON  L16
L18 (    157)SEA FILE=CAPLUS ABB=ON  PLU=ON  METHATHESIS
L19 (      0)SEA FILE=CAPLUS ABB=ON  PLU=ON  METATHATHESIS
L20 (   11263)SEA FILE=CAPLUS ABB=ON  PLU=ON  METATHESIS
L21 (      2)SEA FILE=CAPLUS ABB=ON  PLU=ON  L17 AND L20
L22 (      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  2-METHYL-2-BUTENE/CN
L23 (      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  ISOBUTENE/CN
L24 (      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  PROPENE/CN
L25 (     428)SEA FILE=CAPLUS ABB=ON  PLU=ON  L22/PREP
L26 (   13922)SEA FILE=CAPLUS ABB=ON  PLU=ON  L23
L27 (   37158)SEA FILE=CAPLUS ABB=ON  PLU=ON  L24
L28 (    3908)SEA FILE=CAPLUS ABB=ON  PLU=ON  L26 AND L27
L29 (     60)SEA FILE=CAPLUS ABB=ON  PLU=ON  L25 AND L28
L30 (   14436)SEA FILE=CAPLUS ABB=ON  PLU=ON  CARBENE
L31 (      0)SEA FILE=CAPLUS ABB=ON  PLU=ON  L29 AND L30
L32 (   11263)SEA FILE=CAPLUS ABB=ON  PLU=ON  METATHESIS
L33 (      3)SEA FILE=CAPLUS ABB=ON  PLU=ON  L29 AND L32
L34 (   82949)SEA FILE=CAPLUS ABB=ON  PLU=ON  ACRYLONITRILE
L35 (     54)SEA FILE=CAPLUS ABB=ON  PLU=ON  L20 AND L34
L36 (    145)SEA FILE=CAPLUS ABB=ON  PLU=ON  CROWE
L37 (      0)SEA FILE=CAPLUS ABB=ON  PLU=ON  L35 AND L36
L38 (      9)SEA FILE=CAPLUS ABB=ON  PLU=ON  L30 AND L35
L39 (   91812)SEA FILE=CAPLUS ABB=ON  PLU=ON  RUTHENIUM OR RU
L40 (   35740)SEA FILE=CAPLUS ABB=ON  PLU=ON  OSMIUM OR OS
L41 (  116120)SEA FILE=CAPLUS ABB=ON  PLU=ON  L39 OR L40
L42 (     13)SEA FILE=CAPLUS ABB=ON  PLU=ON  L41 AND L35
L43 (      8)SEA FILE=CAPLUS ABB=ON  PLU=ON  L42 NOT L38

```

```

L44      -----
      0 CARBENE

```

FILE 'CAPLUS' ENTERED AT 06:27:33 ON 30 SEP 2003

```

L45      14441 CARBENE
L46      16 L7 AND L45

```

FILE 'REGISTRY' ENTERED AT 07:20:49 ON 30 SEP 2003

```

L47      0 ME METHYL ACRYLATE/CN
          E METHYL ACRYLATE/CN
L48      1 E3
          E 1-HEXENE/CN
L49      1 E3

```

FILE 'CAPLUS' ENTERED AT 07:22:01 ON 30 SEP 2003

```

L50      11583 L48
L51      9503 L49
L52      228 L50 AND L51

```

=> 120 and 152

```

      11220 METATHESIS
      159 METATHESES
      11268 METATHESIS
      (METATHESIS OR METATHESES)

```

```

L53      1 L20 AND L52

```

=> d 153 ti fbib abs

L53 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Synthesis and application of novel catalytically active polymers
 containing 1,4,7-triazacyclononanes
 AN 2001:694156 CAPLUS
 DN 136:86166
 TI Synthesis and application of novel catalytically active polymers
 containing 1,4,7-triazacyclononanes
 AU Grenz, Achim; Ceccarelli, Simona; Bolm, Carsten
 CS Institut fuer Organische Chemie der RWTH Aachen, Aachen, D-52056, Germany
 SO Chemical Communications (Cambridge, United Kingdom) (2001), (18),
 1726-1727
 CODEN: CHCOFS; ISSN: 1359-7345
 PB Royal Society of Chemistry
 DT Journal
 LA English
 AB New polymers contg. 1,4,7-triazacyclononanes have been synthesized by
 means of ring opening **metathesis** polymn. (ROMP); their complexes
 with Mn catalyze the oxidn. of simple olefins by hydrogen peroxide.
 RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.39	72.01

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.65	-11.07

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6
 DICTIONARY FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
 PROPERTIES for more information. See STNote 27, Searching Properties
 in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e methyl 2-heptenoate/cn

E1	1	METHYL 2-GERANYL-3-OXOBUTANOATE/CN
E2	1	METHYL 2-HEPTADECENOATE/CN
E3	1 -->	METHYL 2-HEPTENOATE/CN
E4	1	METHYL 2-HEPTYL-4,6-DIHYDROXYBENZOATE/CN
E5	1	METHYL 2-HEPTYL-4,6-DIMETHOXYBENZOATE/CN
E6	1	METHYL 2-HEPTYL-4-HYDROXY-6-METHOXYBENZOATE/CN
E7	1	METHYL 2-HEPTYNOATE/CN

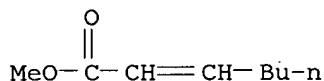
E8 1 METHYL 2-HEXADECYLGLYCIDATE/CN
 E9 1 METHYL 2-HEXADECYLOCTADECANOATE/CN
 E10 1 METHYL 2-HEXADECYNOATE/CN
 E11 1 METHYL 2-HEXENOATE/CN
 E12 1 METHYL 2-HEXYL ACRYLATE/CN

=> e3

L54 1 "METHYL 2-HEPTENOATE"/CN

=> d 154

L54 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 22104-69-4 REGISTRY
 CN 2-Heptenoic acid, methyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN **Methyl 2-heptenoate**
 FS 3D CONCORD
 MF C8 H14 O2
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,
 CHEMINFORMRX, CSCHM, SPECINFO, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

18 REFERENCES IN FILE CA (1907 TO DATE)
 18 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.10	79.11
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-11.07

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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> 154/prep

18 L54
3057580 PREP/RL
L55 7 L54/PREP
(L54 (L) PREP/RL)

=> 152 and 155

L56 0 L52 AND L55

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.14	81.25

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-11.07

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:26:11 ON 30 SEP 2003